

# BYZANTINE COINS



Philip Grierson



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# PREFACE

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This book was planned and a substantial part of it was written in 1965/6, when Alfred Bellinger and I were reading the proofs of the first volume of the Dumbarton Oaks catalogue and I was working on Volume 2. At that time the standard work on Byzantine numismatics was Warwick Wroth's catalogue of the coins in the British Museum, published half a century earlier, and the need for a general handbook on the subject was more evident than it is today. Subsequent sections were written in 1968/9 and 1972, during intervals to my work on *DOC* 2 and *DOC* 3. It was almost completed during the second half of 1977, when the earlier sections were revised and as far as possible brought up-to-date, but a further interruption in 1978–9, when I was engaged in tidying up other pieces of work I had begun much earlier, meant that it did not go to the printer till 1981, by which time still more revision had become necessary.

The aim of the volume is that of providing a reasonably sized manual of Byzantine numismatics, but it may now be asked whether such a book will serve a useful purpose. 'Après une époque de relative pénurie,' Mme Morrisson has written, 'la numismatique byzantine souffre presque de l'excès inverse.' In 1965/6 the only comprehensive work was that of Wroth, which for the Palaeologid period had to be combined with Goodacre's *Handbook*, and much of my original text was devoted to supplementing or correcting the conclusions of Wroth's great work. Fifteen years later the scholar has at his disposal three of the projected five volumes of the Dumbarton Oaks catalogue, the two volumes of the Bibliothèque Nationale catalogue, two parts of Hahn's *Moneta Imperii Bizantini*, Bertelè and Morrisson's *Numismatique byzantine*, Hendy's monograph on the coinage of the period 1081–1261, and Bendall's two handbooks on Palaeologan coinage, to say nothing of two superbly illustrated works at a more popular level by Whitting and Lacam, a comprehensive dealer's list by Sear, and innumerable studies of short periods or problems by over half a dozen scholars from as many different countries.

None of these, however, is a handbook giving in one volume a general history of Byzantine coinage and a descriptive guide to the coins which will serve the general reader and the historian on the one hand, and the numismatist and collector on the other. This is the

purpose of the present volume. Although as a general guide to the coinage it cannot go into the details of dates, officinae and minor varieties that are provided by Hahn and the catalogues of the major collections, it describes and illustrates most of the known types and provides a general conspectus of the coinage during the nine centuries of its history. It gives some explanation of the way in which the coinage took shape and developed in the course of the centuries, and the nature and functions of the types and inscriptions. Despite Mme Morrisson's fears of an 'excès', the literature of the subject has hitherto lacked such a work.

Its relationship to the major reference works, and in particular to the Dumbarton Oaks catalogue, raises the general problem of annotation. Since the great majority of the coins referred to are listed and classified in these works, most of the statements in the main text do not need detailed justification, more particularly since the whereabouts of the coins illustrated is noted in the key to the plates. Nor has it seemed necessary to give references to the abundant secondary literature already employed in *DOC*, *BNC* and *MIB*, where it can be taken for granted that such subjects as the coin types of the seventh century, the origins of the tetarteron, and the debasement of the eleventh century are discussed at length. References in Chapters 2–6 are therefore in principle confined to subsequent articles querying or correcting the conclusions of these works or publishing new material unknown to their authors, though, in order to give credit where credit is due, important articles in which particular problems were first raised and sometimes solved have as far as possible been noted. For the period from 1204 onwards, and particularly for the Palaeologid period, the annotation is much more copious, though for reasons of space one can usually do no more than refer to the literature, without developing arguments about it at any length. No attempt has been made to keep track of the publication of new officinae or new dates whose existence might have been predicted and which in no way change our general picture of the coinage.

My indebtedness to the printed literature will be evident from the notes. I am grateful to my friends Cécile Morrisson, Michael Hendy and Ian Stewart for reading substantial parts of the volume in typescript at some stage or other in its progress. It has benefited greatly from their observations and corrections, although since I have sometimes continued to differ from them, they cannot be held responsible for my conclusions. Chapters 3–6 are based mainly on *DOC* 2 and 3. The first draft of Chapter 2 and part of Chapter 3 have been extensively revised in the light of *MIB* I and II, while for Chapters 7 and 8 I have been able to use not merely Hendy's volume of 1969 but his first draft of *DOC* 4. Chapter 9 is based partly on my own still very incomplete draft of *DOC* 5, but has benefited inestimably from Simon Bendall's and Peter Donald's brochure on the trachea of Michael VIII and their more substantial work on the coinage of Palaeogids. But I fear that the long period of time over which the volume has been written, and the inevitable delay between its completion and publication, means that some sections will be found by readers to be already in need of revision, either because of the author's ignorance of new material or through his failure to take account properly of what was already known. Quite apart from fresh discoveries since the manuscript went to the

printer in 1981, it was not always easy to redraft the text in such a way as fully to consider additions to the literature even before that date.

Other scholars who have been particularly helpful in providing me with information and photographs include Mr A. Veglery and Dr P. Protonotarios, of Istanbul and Athens respectively; Dr Sylvia Hurter of Bank Leu, Zurich; Mr William Metcalf of the American Numismatic Society, New York; Dr Michael Metcalf of the Ashmolean Museum, Oxford; Mr P. D. Whitting of London; and Mr T. R. Volk of the Fitzwilliam Museum, Cambridge. I am particularly grateful to the authorities at Dumbarton Oaks for allowing me to make such abundant use of their material there for the illustrations. Credit for the high quality of the photographs, in proportions I cannot now attempt to determine, has to be divided between Wallace Lane, Richard Amt, Peter Berghaus and Ursula Pariser.

Gonville and Caius College, Cambridge

*Philip Grierson*

# ABBREVIATIONS

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The following abbreviations are used in the text, some of them (e.g. gl. cr. = globus cruciger) being limited to the coin descriptions. For full bibliographical details of the books referred to, see the Select Bibliography.

AE	copper ( <i>aes</i> )
AR	silver ( <i>argentum</i> )
AV	gold ( <i>aurum</i> )
B	billon
BB	black billon
BCEN	<i>Bulletin</i> [du] <i>Cercle d'Etudes numismatiques</i> (Brussels)
BM	British Museum, London
BN	Bibliothèque Nationale (Cabinet des Médailles), Paris
BNC	Morrisson, C., <i>Catalogue des monnaies byzantines de la Bibliothèque Nationale (491–1204)</i> (1970)
BSFN	<i>Bulletin de la Société française de numismatique</i>
BZ	<i>Byzantinische Zeitschrift</i>
CNA	<i>Cronica numismatică și arheologică</i> (Bucharest)
DO	Dumbarton Oaks, Washington
DOC	Bellinger, A. R. and Grierson, P., <i>Catalogue of the Byzantine coins in the Dumbarton Oaks Collection and in the Whittemore Collection</i> (1966 ff.)
DOP	<i>Dumbarton Oaks Papers</i>
El	electrum
emp.	emperor or empress
FW	Fitzwilliam Museum, Cambridge
gl. cr.	globus cruciger
HBN	<i>Hamburger Beiträge zur Numismatik</i>
Hendy	Hendy, M. F., <i>Coinage and money in the Byzantine Empire, 1081–1261</i> (1969)

<i>LPC</i>	Bendall, S. and Donald, P. J., <i>The later Palaeologan coinage 1282–1453</i> (1979)
<i>MIB</i>	Hahn, W., <i>Moneta Imperii Byzantini</i> (1973 ff.)
<i>MN</i>	<i>Museum Notes</i> (American Numismatic Society)
<i>NC</i>	<i>Numismatic Chronicle</i>
<i>N. Circ.</i>	Spink's <i>Numismatic Circular</i>
<i>NNM</i>	<i>Numismatic Notes and Monographs</i> (American Numismatic Society)
<i>O</i>	Ashmolean Museum, Oxford
<i>R.</i>	Ratto, R., <i>Monnaies byzantines</i> (1930)
<i>RBN</i>	<i>Revue belge de numismatique</i> (initially <i>Revue de numismatique belge</i> )
<i>REB</i>	<i>Revue d'études byzantines</i>
<i>RIN</i>	<i>Rivista italiana di numismatica</i>
<i>RN</i>	<i>Revue numismatique</i>
<i>S.</i>	Sabatier, J., <i>Description générale des monnaies byzantines</i> (1862)
Schlumberger	Schlumberger, G., <i>Numismatique de l'Orient latin</i> (1878–82)
<i>SCMB</i>	Seaby's <i>Coin and Medal Bulletin</i>
<i>SCN</i>	<i>Studii și cercetări de numismatică</i>
Spahr	Spahr, R., <i>Le monete siciliane dai Bizantini a Carlo I d'Angiò (582–1282)</i> (1976)
<i>T.</i>	Tolstoi, J., <i>Monnaies byzantines</i> (1912–14)
<i>VV</i>	<i>Vizantiiskii Vremennik</i>
<i>W.</i>	Wroth, W., <i>Catalogue of the imperial Byzantine coins in the British Museum</i> (1908)
<i>Wh.</i>	Whittemore Collection, Fogg Museum, Cambridge, Mass.
<i>WV</i>	Wroth, W., <i>Catalogue of the coins of the Vandals . . . in the British Museum</i> (1911)



# I

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## BYZANTINE COINAGE: GENERAL FEATURES

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### Origins and background

Byzantine coinage can no more be dated from a fixed point in time than can the Byzantine Empire itself. In each case there was a development by gradual stages out of a Roman predecessor. Under Marcus Aurelius the Empire was still Roman, though he might write his *Meditations* in Greek. Its capital was Rome, its political structure differed in only minor respects from that of the first century AD, its monetary system consisted of the traditional aureus, denarius, sestertius, dupondius and as, going back in its essential elements to Augustus or beyond. Under Diocletian the Empire was in process of being militarized and Orientalized and its monetary system of being reorganized, but neither politically nor monetarily had it yet achieved a new stable basis. Under Constantine it acquired a new ideology with Christianity, a new political centre with Constantinople, and a new monetary system, with the solidus, miliarensis and follis<sup>1</sup> replacing the aureus, denarius and sestertius of the Principate. Although often modified in detail, the coinage of the fourth century has a recognizable unity and seems to have provided satisfactorily for the economic needs of late Roman society.

In 395, on the death of Theodosius I, the Empire was divided between his two sons, Arcadius and Honorius, and its political and monetary systems passed again into the melting pot. During the fifth century the eastern provinces remained under the rule of a separate line of emperors at Constantinople; the western ones came to be occupied for the most part by Germanic invaders. It was thus at Constantinople that the authority of the Roman Empire

<sup>1</sup> For these terms see pp. 15–16 and the Glossary. The large coin of the period of the Tetrarchy which numismatists term a *follis* was probably

called a *nummus* by contemporaries. Only from Anastasius I onwards was the largest denomination of copper coins regularly termed a *follis*.

was effectively maintained, and the later Roman Empire merged imperceptibly into the East Roman or Byzantine one. The political disasters of the fifth century were accompanied by an economic crisis in the course of which much of the reformed monetary system of Constantine disappeared. Silver coinage passed out of normal use, and of the bronze coinage only the nummus, the smallest fraction of the follis, a piece of metal smaller than the nail of one's little finger, continued to be struck. The gold coinage, however, survived, and a new series of coinage reforms were based on it in the last decades of the fifth century.

In view of this complicated background it is not surprising that numismatists have been divided in their opinions as to the most appropriate date for the start of Byzantine coinage. The first and oldest school, represented by all writers on Roman coinage between the sixteenth and the eighteenth centuries, adopted the simple procedure of ignoring the separate existence of 'Byzantine' coinage altogether; they continued the coinage of the Roman Empire up to the fall of Constantinople in 1453. A second school, represented by Sabatier's classic *Description générale des monnaies byzantines* (1862) and Tolstoi's *Monnaies byzantines* (1912–14), favoured the reign of Arcadius (395–408), on the ground that this marked the effective separation of the Empire into eastern and western halves, the Greek-speaking eastern half being that out of which the Byzantine Empire was to develop. A third school, represented by Wroth's *Catalogue of imperial Byzantine coins in the British Museum* (1908), started with Anastasius I (491–518), since by his time the western line of emperors had come to an end and it was his reforms that created the characteristic pattern of Byzantine coinage for centuries to come.

Of these three possibilities the first is logically the most satisfactory. Constantine XI<sup>2</sup> was constitutionally the last successor of Augustus, and the coins of the Palaeologids, unlike as they are in external appearance to those of the fourth century AD, have at least a tenuous connection with them. But in fact Byzantine coins are very different from Roman ones, just as the Byzantine Empire was in fact very different from its Roman predecessor. We have to choose between Arcadius and Anastasius, and although there is something to be said for beginning Byzantine coinage with the definitive introduction of the three-quarter facing bust on the solidus by Arcadius in 395, rather than with the emperor who reintroduced the follis in the last decade of the fifth century, there are good reasons for preferring Anastasius. The first is that Arcadius' coinage does not begin with the division of the Empire in 395 and so does not correspond to the dates customarily given for his 'reign' (395–408). This began in 383, when he was made co-Augustus by his father, and the bulk of his coinage belongs to the years

2 There are some ambiguities in the numbering of Byzantine emperors named Constantine, according to whether or not one includes persons associated as co-emperors by their fathers, so that they appear in documents and on the coins, but who did not live long enough to have separate reigns. Thus Sabatier describes Con-

stantine Porphyrogenitus as Constantine X, instead of Constantine VII as is now customary, and the last Constantine as Constantine XIII. The numbering used here is that of Wroth and of virtually all modern Byzantine historians.



383–95 and cannot be separated logically from that of his co-emperors Theodosius I, Valentinian II, Gratian, and the rest. The second is that the separation of the coinages of eastern and western emperors, between 395 and 476, is quite artificial. The formal unity of the Empire was preserved by eastern emperors having coins struck in their names with western types at western mints, and vice versa, so that the two series of coinages are too closely intertwined for any separation by the names of the emperors on them to be meaningful. Even the deposition of Romulus 'Augustulus' in 476 does not make a wholly satisfactory break, for the coinage of Italy under Odovacar and the Ostrogoths remained formally 'imperial' in character. But a break has to be made somewhere if we are to separate off the highly distinctive coinage of Byzantium from that of Rome, and Anastasius' creation of the 'Byzantine' follis marks a more decisive change than any other.

If the coinage of Anastasius marks a continuation of that of earlier times, it does so only with limitations that have to be kept in mind. By AD 500 many of the former mints of the Empire had passed out of imperial control, with the provinces in which they were situated. The coins struck by the Germanic invaders usually bore the name and effigy of an emperor, but the emperor on the coins was not necessarily the person currently reigning at Constantinople. The names of earlier emperors were often perpetuated by a process of immobilization, arising out of the need to conserve a familiar pattern on the coins. Anastasius' own coinage was limited to mints in the East, and even there only half those active in former times were still in operation. As for the coins themselves, those of the first years of his reign continued the types and denominations of Zeno, which in turn represented little more than the debris of the imperial system as it had been a century before. Types had diminished in variety and denominations in number, and a new monetary system had to be brought into existence.

## The phases of Byzantine coinage

If Byzantine coinage be dated from Anastasius, however, it was in many respects not yet fully Byzantine in character. It is true that the solidus, which Anastasius inherited, and the follis, which he introduced, were to be the most characteristic Byzantine denominations, but they are still only in part Byzantine in appearance. The effigy of the emperor plays on them the role which it was generally to maintain in the future, but religious symbolism had scarcely begun. It is any case difficult to characterize the phases through which Byzantine coinage was to pass, still more to distinguish them from one another. Categories based on types overlap those based on denominations. The phases of the gold do not coincide with those of the silver, and neither of these reflect at all closely the changes in the copper. Rather than trying to base a summary on conflicting numismatic categories it will be simpler to summarize the chief aspects of the coinage in each of the main periods of Byzantine history, leaving the details and their explanations to emerge in subsequent chapters.

## ANASTASIUS I – PHOCAS, 491–610

The area served by the imperial coinage was extended by the reconquest of North Africa from the Vandals (533/4), Italy from the Ostrogoths (535/53), and a small strip of southern Spain from the Visigoths (551). The number of mints was steadily increased, until by the end of the sixth century there were eight major and several minor ones in regular operation, while others had been temporarily called into existence at various times during the century. Mint-marks are usually present on the copper coins; for coins of other metals, and for copper coins where such marks are absent, precise mint attributions are sometimes difficult.

The major changes in the external appearance of the coins were the Christianization of the types of the gold – the traditional Victory was replaced first by an angel and later by a cross – and the introduction of large copper folles and their fractions bearing marks of value and, subsequently, facing busts instead of the profile ones that had been almost invariably used on the coinage since the time of Augustus. In 539 the practice was introduced of dating at least the larger denominations of copper by the regnal year of the emperor.

The standard denominations of gold coins were the solidus and its half and third, the semissis and tremissis. Half tremisses, and gold medallions of higher weight than the solidus, were occasionally struck. Several subordinate series of light-weight solidi, mainly of 23,  $21\frac{1}{2}$ , or 20 carats, were introduced in the second half of the sixth century.

Silver was used in the East only for rare ceremonial issues, as it had been in the preceding century, but in North Africa a limited silver currency succeeded that of the Vandals and in Italy a more extensive one that of the Ostrogoths.

In the copper coinage a revolution was effected. Anastasius started with nothing but a tiny nummus. Following the example of the Roman Senate, which after 476 had revived its ancient prerogative of striking large copper coins, he introduced in 498 three denominations, the follis of 40 nummi and its half and quarter. Later in the reign he doubled the size of the coins and added a one-eighth follis (pentanummium). Under Justinian the size of the coins was further increased, dating was introduced, and folles and their fractions based on the types used in the East were introduced into Africa and Italy after their reconquest. The coins were at their heaviest in the four years 539–42; after that they suffered successive reductions in weight, so that by the end of the century the pentanummium had become so small that the denomination was ceasing to be struck, particularly in the East. This reduction in weight was accompanied by the growing practice of overstriking old coins as a cheap alternative to the making of fresh blanks. Egypt had a monetary system based on a dodecanummium of 12 nummi, distinct from the 40-nummus follis of the rest of the Empire, Thessalonica for a time under Justinian struck a set of values peculiar to itself, and Cherson at the end of the sixth century treated the pentanummium as the unit, so that its folles and half folles are marked H (8) and Δ (4) instead of M (40) and K (20) respectively.

## HERACLIUS – THEODOSIUS III, 610–717

This period of Byzantine history is dominated by the disasters which befell the Empire at the hands of the Persians, the Arabs and the Slavs. The Persians overran Syria, Palestine and Egypt and repeatedly invaded Asia Minor; the Arabs conquered the first three of these provinces and North Africa as well; the Slavs occupied most of the Balkan peninsula. The Visigoths in addition reconquered the small Byzantine foothold in Spain and the Lombards much of Byzantine Italy. These appalling disasters, involving the loss of two-thirds of what in 565, the date of Justinian's death, had still been imperial territory, had a catastrophic effect upon Byzantine coinage.

The area over which the coinage circulated was effectively reduced to Asia Minor and parts of Greece and Italy. Most of the eastern mints were either occupied by the enemy (Antioch, Alexandria) or closed down (Nicomedia, Cyzicus, Thessalonica) as a result of financial reorganization under Heraclius, so that by the end of the seventh century only Constantinople was still active in the East. In the West, Carthage and the Byzantine mint in Spain were occupied by the Arabs and Visigoths respectively. But the loss of so much ground in the East increased the relative importance of Sicily in the Empire, and at the end of the seventh century the output of gold and copper from the mint of Syracuse may have equalled or even surpassed that of the capital. Minor mints came and went during the Heraclian period as military or political exigencies required.

As a result of these political disasters the monetary system created by Anastasius virtually collapsed. The follis was reduced to a miserable and repeatedly overstruck scrap of metal weighing only a fraction of what it had done in 540; attempts at reform by Heraclius and Constantine IV came to nothing. The half and quarter follis were issued only spasmodically and in small quantities, the pentanummium was struck in the East only in the early years of Heraclius and again under Constantine IV; the nummus disappeared altogether. The gold coinage on the other hand remained abundant, and a new silver coin, the hexagram, was introduced in 615 and played a major role until c. 680, when it ceased to be struck except for ceremonial purposes. An incidental result of the disasters that overtook the coinage was the periodical resort to countermarking under Heraclius, Constans II and Constantine IV, these being almost the only examples of the practice in Byzantine history. The eastern issues of light-weight solidi ceased under Justinian II, but under the same ruler the weight of the solidus was reduced in Sicily and its fineness deteriorated sharply in Italy.

The external appearance of the coinage underwent a number of modifications. The type of the solidus was altered much more frequently than had recently been customary, partly to accommodate the frequent and sometimes complicated associations of emperors and partly, as a consequence of the reintroduction of portraiture by Phocas, to take account of changes in their personal appearance. A featureless profile bust was still used in the East on the smaller denominations of gold down to Justinian II. Throughout the period the

copper coins were extraordinarily slovenly in fabric and usually in design. A major innovation of Justinian II was the introduction of the bust of Christ as the obverse type on his gold, but this was not retained by his successors.

#### LEO III – MICHAEL II, 717–820

Despite the violence of the Iconoclastic controversy, the Isaurian period saw the internal reconstruction of the Empire and the recovery of the southern half of the Balkan peninsula, though the isolated Byzantine outposts in northern and central Italy were either lost to the Lombards or became independent. Ravenna ceased to be an imperial mint in 751, Rome in 776 or 781, and the last issues of gold from both mints were of poor-quality metal as well as being light in weight. The eighth century and the opening decades of the ninth saw the breaking of many links which had bound the coinage of the early Byzantine period to that of the later Roman Empire.

The traditional CONOB on the gold and CON on the copper were abandoned under Leo III and the subdivision of the mint of Constantinople into officinae came to an end. Only Officinae A and B continued into the 730s and only A after 751, though this now meaningless mark remained on the coins until it was abolished by Michael II. Greek titles (*basileus*, *despotes*) and phrases (e.g. CONSTANTINOS S IRINI $\epsilon$  C C Θ $\epsilon$ Υ basilis, Κωνσταντῖνος καὶ Εἰρήνη ἐκ Θεοῦ βασιλεῖς) replaced Latin ones. D(*ominus*) N(*oster*), the traditional opening of the inscription, which had been in continuous use since the fourth century, ceased to be systematically used after 717 and vanished in the later part of the century. Greek letter-forms more and more tended to displace Latin ones in the inscriptions.

The semissis and tremissis practically ceased to be struck in the East after the reign of Leo III, continuing only as ceremonial coins, the last specimens actually known being of the reign of Basil I. In the more conservative provinces of the West, which lacked a silver coinage, they lasted down to the closure of the mint of Sicily in 878.

The Anastasian system of the copper denominations was formally brought to an end. Fractions of the follis with K and I as marks of value were last struck under Constantine V (741–75). Later half folles, when they were struck at all, simply reproduced the type of the follis but were half its size, and the mark of value M, which was now meaningless, was last used in the East under Michael II. The follis itself underwent many changes in size and weight. Leo III increased its weight but the reform was only temporary, and a century later another heavy follis had to be introduced by Michael II.

The major novelty in this attenuated coinage system, holding the two parts of it together, was the miliaresion introduced by Leo III in 720. Its broad, thin fabric, and its replacement of a figured type by an inscription occupying the whole of one face of the coin, were copied from the Arab dirhem. The miliaresion was initially intended as a ceremonial piece, but was found to satisfy an economic need and became in due course a permanent feature of the currency.

Imperial representations now became purely linear and schematic, with no attempt to show actual likenesses; senior and junior emperors were distinguished simply by size and by the presence or absence of a beard. There are a number of interesting 'family' coinages, with the later Isaurian emperors placing on the coins representations of their deceased ancestors. The cross disappeared as the normal reverse type on gold coins under Leo III, being replaced by the effigy of the junior emperor, an arrangement which became so generally accepted that when the emperor had no colleague, like Irene after 797 and Michael I in the first months of his reign, the reverse type was often another representation of the emperor himself.

#### MICHAEL II – NICEPHORUS II, 820–969

It was under the Amorion rulers (820–67) that the Empire began to reap the fruits of the Isaurian reforms, and under their Macedonian successors that it reached the height of its cultural achievement. For the numismatist the long Macedonian period (867–1056) can be divided in 969, since the coinage of the century 867–969 has more features in common with that of the Amorians than it has with that of the tenth century.

The major changes in the geography of the Empire during the period were the loss of Sicily to the Arabs and the recovery of some of the lost lands in the Balkans and Asia Minor. The first of these entailed the closure in 878 of the last remaining western mint, that of Syracuse, which after a decade of intense activity under Theophilus tailed off into the issue of fractional coins of very base electrum under Michael III and Basil I. From Michael III to Basil II the outlying and semi-autonomous possession of Cherson, important as an observation post reporting on tribal movements north of the Black Sea, issued a regular coinage of copper quite different from that of the rest of the Empire. With these exceptions, however, the only mint normally in existence was Constantinople.

The gold coinage of the period is practically limited to solidi. Semisses and tremisses, in almost every case known only in unique specimens, continued to be struck for ceremonial purposes down to Basil I, but none is known later. Theophilus revived the occasional striking of ceremonial solidi of unusual types, and although there was no general departure from the linear style and impersonal effigies of the Isaurian period the designs of the coins are usually more elaborate, and there was some revival of portraiture, notably under Leo VI and Constantine VII. There was also, under Michael III, a fundamental change in the appearance of the coins. The solidi of Michael II and Theophilus resemble those of the Isaurians in lacking, with one short-lived exception, a specifically religious type, for the reverses show either a co-emperor or deceased members of the imperial family. The restoration of images in 843 was marked on the coinage by a return to the type of Justinian II showing a bust of Christ, and thenceforward the representation of the emperor on one side of the coins was to be balanced by one of Christ on the other.

The silver and copper coins were by now reduced to the issue of a single denomination in each metal, a rule that was only occasionally broken. The miliaresia underwent several

changes in weight, but very little in external appearance. Under Theophilus they were for the first time struck in the name of a single emperor, and not of colleagues, a mark of their now being fully accepted as a regular element in the circulating medium. Much greater changes took place in the copper. Michael II introduced much larger folles than had been customary, and Theophilus broke with a tradition going back to Anastasius I when he replaced the mark of value M by an inscription in several lines running across the field. In so doing he established a new tradition that was to last down to the death of Nicephorus II (969).

#### JOHN I – NICEPHORUS III, 969–1081

It was under the three military emperors Nicephorus Phocas, John Zimisce and Basil Bulgaroctonos that the Byzantine Empire reached the height of its power. Most of the northern Balkans was reconquered from the Slavs; Syria and Crete were retaken from the Saracens. But under Basil's successors the tide began to turn against an empire that had overreached its strength, and by 1081 Byzantium had lost much of Asia Minor and all its ancient possessions in southern Italy. The fluctuations in imperial fortunes, however, though they affected the area served by Byzantine coinage, were not reflected in mint changes, for Constantinople, save on rare occasions, seems to have served the whole of the Empire. The three traditional denominations underwent considerable changes during the period, and by its end the monetary system was well on the way to collapse.

#### *Solidus or nomisma*<sup>3</sup>

It was the solidus, the traditional linchpin of the Byzantine monetary system, that saw the most profound changes. These involved first its break-up into two denominations, the histamenon and the tetarteron, and subsequently its debasement, with the associated emergence of the saucer-shaped fabric so characteristic of later Byzantine coinage. There were also many changes in the types of the coins, some of which are amongst the most beautiful ever to have been issued by the Byzantine mint.

The break-up of the nomisma began under Nicephorus II, who issued a light-weight coin known as a tetarteron, in contrast to that of traditional weight which in due course came to be called an histamenon ('standard'). At first the two coins, both of which continued to be termed *nomismata*, differed only in weight, but in Basil II's reign they began to be of different types and fabric, the histamenon becoming larger and thinner and the tetarteron smaller and

<sup>3</sup> *Nomisma* (νόμισμα) was the normal Greek name for what in Latin is termed the *solidus*. Numismatists are accustomed to use the term *nomisma* from about the reign of Basil II onwards, but there is no rule or logic in the

matter. It is used in Greek documents from the very beginning of the Empire, just as *solidus* is used in Latin documents of Byzantine Italy in the eleventh century.

thicker so that there was no danger of confusion between them. Under Michael IV (1034–41) debasement began, and though at first only slight it gained momentum, more particularly after the disaster of Manzikert in 1071, so that by 1081 the nomisma histamenon was a pale yellow coin heavily alloyed with silver and only about 8 carats fine. Under Constantine IX the histamenon began to be made concave instead of flat, and in the 1050s this became its regular form. The term *scyphate* formerly used to describe it is a misnomer, the *scyphati* of eleventh-century Italian documents not referring to concave coins at all. In the East these were described as *trachea* (sing. *trachy*), from τραχύ, literally ‘rough’ but here used in the sense of ‘uneven’, ‘not flat’.

### *Miliaresion*

The silver coinage continued with only slight changes from emperor to emperor to the end of the tenth century. In the eleventh century it began to break up, very much as the gold did, two-thirds and one-third miliaresia being introduced, and the traditional inscription and cross potent were abandoned in favour of designs involving a bust or a standing figure of the Virgin or Christ or a standing figure of the emperor.

### *Follis*

The copper coins for most of the period remain large and heavy, Basil II for a time bringing their weight back to nearly 20g, which they had been in the sixth century. They are dominated by John Zimisce's replacement of the imperial effigy on the coins by that of Christ, all reference to an individual emperor being suppressed. The issues of the Anonymous Folles, as they are generally called, lasted for over a century into the reign of Alexius I, though from Constantine X onwards they were mixed with types having the effigy and the name or initial of the reigning emperor. They are of a number of different types and can be arranged in chronological sequence by a study of their overstriking, though only the later coins, which are found overstruck on (or by) others having the effigy of some particular emperor, can be dated with precision.

### ALEXIUS I – ALEXIUS V, 1081–1204

The coinage of the Comnenid and Angelid periods has obvious links with some elements of that of the mid-eleventh century, but as a whole is strikingly different from anything that had preceded it. Its most characteristic feature is the predominantly concave character of the coins, the only flat ones being small copper or, under Alexius I only, lead pieces and, again under Alexius I only, the miliaresia and tetartera of the old coinage system, the tetartera being so debased as to appear of silver or billon (base silver). Within the framework of the concave coinage there was on the one hand the revived use of coins of good-quality gold

known as hyperpyra,<sup>4</sup> and on the other the appearance of base denominations of electrum and billon. A proper understanding of the coinage was long delayed by Wroth's unfortunate grouping together of all the concave coins, whatever their metal, under the general heading of 'nomismata'.

The main lines of the coinage date from 1092. Byzantine chroniclers accuse the emperor Alexius I (1081–1118) of shamelessly debasing the coinage, but fail to record that he subsequently reformed it. Inheriting from his predecessors a monetary system already in the last stages of disarray, he was forced by the political difficulties of the first decade of his reign to push it to the point of complete collapse. In 1092 he established a new currency system which conferred upon the Empire a high degree of financial stability for at least another century. Accepting the fact that coins of base metal had come to stay, he organized them into a system, reviving within this a coinage of passably good gold but abolishing the traditional follis in favour of a much smaller copper coin. The use of debased coins, it should be remembered, is not in the least reprehensible provided their character is admitted and their precious metal content known. Their danger lies in the temptation they offer to further debasement, for a government in financial difficulties will easily convince itself that the proportion of base metal in the alloy can be secretly or temporarily increased without its coming to the notice of the public.

The essential elements of the Comnenid system were as follows.

(1) The hyperpyron, a concave coin which although slightly debased ( $20\frac{1}{2}$  carats) had a satisfactory golden appearance and replaced the old nomisma histamenon, with which it was identical in weight. The fineness remained unchanged throughout the period 1092–1204.

(2) A concave coin of base gold (electrum) *c.* 7 carats fine, which was rated as a one-third hyperpyron. It is sometimes called a trachy in the texts, but this term was also applied to the denomination next to be described and it is therefore necessary to qualify it as being of electrum. It is sometimes called a tricephalon ('three header') in the documents, and many types of the denomination indeed show three figures, one on the obverse and two on the reverse.

(3) A concave coin of low-grade billon resembling copper, through its value theoretically depended on its minute silver content, just as did that of the 'black money' of many feudal states in the West during the later Middle Ages. These coins, commonly described as copper scyphates by modern writers, were called indifferently trachea or histamena by contemporaries, the latter term being presumably applied to them because in appearance they continued the last completely debased 'gold' histamena issued by Alexius I before his reform. The term was generally adopted by twelfth-century Latin writers in the form 'stamena'. The

4 Modern scholars, influenced by the twelfth-century Latin spelling *perperum* and its vernacular derivatives, often spell the word *hyperperon*. The matter is not one of importance, but

the Greek is *υπερπυρον*, and if one preserves the initial *hy* it is logical to use *y* for *υ* the second time this occurs.



value of the coin, in relation to the hyperpyron, sank steadily in the second half of the twelfth century as the result of continued debasement. It was worth 1/48th of the hyperpyron in 1136, 1/120th in 1190, and 1/184th in 1199.

(4) The tetarteron or tarteron, a small flat coin of copper so-called because it resembled in fabric the tetarteron of the previous century. The introduction of the stamenon of low-grade billon as a permanent feature of the currency killed the heavy follis for exactly the same economic reasons as the final debasement of the antoninianus in the third century AD had killed the heavy sestertius and dupondius of the Principate. Since the copper tetarteron was the smallest denomination to be struck it was sometimes called a nummus, though its exact relationship to the stamenon and the higher denominations is uncertain and is unlikely to have remained fixed.

The invasion of the whole currency system by the concave fabric resulted in a marked artistic decline in the coins, for, however good the designs, exactness in striking was practically inhibited by the concave and convex shapes of the die faces. The iconographical tendencies of the preceding century were accentuated. The Virgin now played as important a role as Christ; new saints put in their appearance, St Demetrius on coins of Thessalonica under Alexius I, St George under John II, St Theodore under Manuel I, St Constantine under Alexius III. The emperors, either magnificently robed or wearing military costume, tended to be shown standing, and unless the individual emperor had some striking personal feature, like the conspicuous forked beard of Andronicus I, there was little attempt at portraiture.

#### THE EMPIRE IN EXILE, 1204–61

In 1204 Constantinople was occupied by the Latins and the Empire partitioned between the Venetians and the leaders of the Franks, but the Crusading victory was less complete than at first appeared and various 'Byzantine' states managed to survive. That the Latin Empire possessed a mint, exploited by the Venetians, is certain, for in a convention of 1219 the Venetian *podestà* at Constantinople and Theodore I of Nicaea agreed that neither would strike hyperpyra, *manuelati* or stamena in imitation of those of the other. Sabatier assigned to the Latins several types of Anonymous Folles which are now known to belong to the eleventh century. Wroth gave them no coinage at all. Hendy attributed to them, on the basis of hoard evidence, large numbers of very common trachea partly imitated from those of twelfth-century emperors and partly original in design. Despite reservations or objections on the part of some scholars this attribution is now generally accepted. For a silver coinage the Latins presumably relied on the Venetian silver grosso or ducat, introduced in 1201, which is markedly Byzantine in its design.

The rulers of two of the Byzantine successor states, Epirus-Thessalonica and Nicaea, had at one time or another hopes of recovering the capital and the full imperial heritage. Both of them struck coins of the general Comnenid pattern, with a predominance of concave issues

and a great variety of types, but only Nicaea was in a position to issue gold hyperpyra. The coinage of the independent state of Trebizond, more remote from Constantinople, developed on lines of its own, with an abundant issue of flat silver aspers recalling in their general fabric the silver coinage of the Seljuqs of Rum and the kings of Lesser Armenia. Since the state never merged again with that of Byzantium, and Trapezuntine coinage is so different from that of Nicaea and the Palaeologid Empire, it can best be treated as a separate subject in its own right.

Our study of the coinage of the several successor states is hampered by the duplication of names between their rulers and by the absence of any indication on the coins themselves of where they were struck. One can usually distinguish the products of Thessalonica from those of Magnesia, the chief mint of the 'Empire' of Nicaea, but it is not always easy to separate coins of Theodore II of Nicaea from those of Theodore I or even from those of John III, since some coins are anonymous and even when they bear inscriptions these are often illegible through faulty striking. One is sometimes helped by the local connections of particular saints, for example, St Demetrius with Thessalonica and St Tryphon with Nicaea, but these indications can be misleading. The period saw a proliferation of new and interesting types. The emperors are sometimes shown as winged; coins of Nicaea often bear a large fleur-de-lis, a symbol associated with the legend of St Tryphon; and a handsome coin of Thessalonica shows Manuel Comnenus Ducas and St Demetrius seated together on a throne, holding between them a representation of the city.

#### MICHAEL VIII — CONSTANTINE XI, 1261–1453

The last two centuries of Byzantine coinage are a period of complete artistic decadence. Even when the thematic content of the types is of interest the designs themselves, despite their variety, remain poor; the wonderful revival of painting which gave us the frescoes of the Kariye Djami found no echo amongst the die-sinkers in the mint. The influence of western coin designs is apparent in many issues, but the Byzantine derivatives are in every case startlingly inferior to their Latin prototypes. Up to the mid-fourteenth century there is a general resemblance to the coinage of the Comnenids and of the thirteenth century, for the greater part of it consisted of concave denominations, though the introduction of flat silver issues under Andronicus II indicates a revival of good-quality coins in this metal. The later coinage is quite different in character. The main lines of the period can be summarized as follows.

#### *Gold coinage*

Michael VIII brought back an already debased hyperpyron to Constantinople in 1261, and under his two successors the quality of the coins became steadily worse. The last regular issue of hyperpyra can be dated to c. 1350, in the joint reign of John V and John VI. Thenceforward the hyperpyron remained in existence only as a money of account.

*Silver coinage*

There were two separate revivals of silver coinage in the Palaeologid period. (1) Andronicus II in *c.* 1302 introduced a coin known as a *basilicon*, modelled on the silver ducat of Venice. It continued to be struck down to about the middle of the century, though its weight was drastically reduced in the 1330s. (2) Late in the reign of John V, either shortly before the usurpation of his son Andronicus IV (1376) or possibly in the latter's brief reign (1376–9), there was introduced a very heavy silver coin (*c.* 9g) which was called a *stavraton* and had the value of a half hyperpyron in money of account. Its original design, with a double circle of inscription around a central type, was modelled on some derivative of the western *gros tournois*, but its artistic quality was so deplorable that the moneyers responsible for the latter would scarcely have been prepared to admit the relationship. It lasted, in company with various fractional pieces, down to the end of the Empire.

*Billon and copper coinage*

This was struck in great profusion down to the middle of the fourteenth century but on a smaller scale thereafter. There was also at first a very great variety of types, and some borrowing of western designs. The earlier series were partly concave, partly flat, but about the middle of the fourteenth century the use of concave types, so marked a feature of Byzantine coinage for nearly three hundred years, suddenly disappeared.

\* \* \*

Taking Byzantine coinage as a whole, it is impossible not to be struck by the independence of its traditions and the contrasts it constantly presents with the coinage of Latin Christendom. It was, over the centuries, predominantly a coinage of gold and copper, while for the space of five hundred years, from *c.* 780 to *c.* 1250 in Frankish and imperial Italy and for even longer elsewhere, the coinage of the West was almost exclusively one of silver. But a closer examination brings unexpected connections to light and explains some of the contrasts. The introduction of the silver *miliaresion* by the Isaurians is not far removed in time from the introduction of the silver penny under the later Merovingians and its establishment as the dominant coin of western Europe by Pepin and Charlemagne and by the latter's English contemporary Offa. The decline of the *miliaresion* after *c.* AD 1000 is paralleled by the widespread debasement of the western *denier* in the eleventh century, each phenomenon in turn being linked, in some fashion still imperfectly understood, to what has been termed the 'silver famine' of the Islamic world. The decline of the hyperpyron, beginning towards the middle of the thirteenth century, was immediately followed by the first striking of gold in the great commercial cities of Italy, and the coin came to an end in the fourteenth century at precisely the moment when the issue of gold was being extended to new areas of Latin Christendom (Flanders 1335, England 1343, Lübeck 1343, Cologne 1346). The commercial balance was by then so much in favour of the West that this sad end to the Constantinian tradition can easily be understood.

## Metals, denominations and marks of value

The Byzantine Empire, like the Roman Empire before it, made use of the traditional three metals in which the magistrates of the Republic had been authorized to coin (*aere argento auro flando feriundo*). It also made extensive use, during the last four centuries of its existence, of electrum and billon.

The gold of late Roman and early Byzantine coins was of a high degree of purity, the technical term *obryzum* (ὄβρυζον) which was used to describe it being familiar through its incorporation in CONOB and similar formulae. Only from the mid-eleventh century onwards was the gold of the capital regularly debased, this being done by the addition of silver or of silver and copper in varying proportions. Usually silver alone seems to have been used, or at least to have predominated, but there was a certain proportion of copper in the debased hyperpyra of Michael VIII and his successors. (Such an alloy was usually avoided by medieval mints because it hardened the gold and shortened the life of the dies.) The Byzantines probably expressed the fineness of gold in terms of carats, as was customary in the Arab and western worlds throughout the Middle Ages, since this system derives from the fact that the Constantinian solidus weighed 24 carats and a carat thus became synonymous with a twenty-fourth part. There seems, however, to be no direct evidence on the matter, and George Pachymeres, describing the general debasement of the thirteenth-century hyperpyron, does so in terms of 'parts' (μέρη). Numismatists are accustomed to apply the term *electrum* to any Byzantine coins of base gold, whatever the alloy, provided the debasement is apparent to the eye, but where debasement is not evident in this fashion, as with the hyperpyron of 20½ carats, the coins are treated as gold.

Less is known about the quality of Byzantine silver coins, but most of them – the seventh-century hexagram, the thin, broad miliaresion, the silver stavraton of the late fourteenth and early fifteenth centuries – have been shown by analyses to be of pure or nearly pure silver. Possibly they were intended to correspond to something approaching the nearly pure standard customary in the West, where in France and England *argent-le-roi* (11 d. 12 gr. fine = 958/1000) and sterling (11 oz 2 dwt = 925/1000) were respectively taken as fine. Other coins are certainly of billon. This is a technical term which has been used since the thirteenth century in western Europe for silver alloys containing less than 50 per cent of precious metal; its Byzantine equivalent is unknown. One is a little hesitant over applying it to the concave 'bronze' coins of the twelfth century, since to all appearances these contain no silver at all, but the same is true of western 'black money'. This could fall as low as a fineness of only 4 grains, i.e. less than 3 per cent silver, which meant that individual coins would contain virtually no silver at all. It is, however, necessary to maintain the theoretical distinction between billon and copper coins, since this played a role in the system of denominations even when, as in the thirteenth and fourteenth centuries, this nominal silver content had disappeared. How the Byzantines expressed the fineness of their silver coins does not seem to be known.

The lowest denominations of Byzantine coins have commonly been described as bronze, but such analyses as are available show that they were intended to be copper, and a sixth-century author refers to the reddish colour of the contemporary follis. In practice little care was taken over the precise quality of the metal, and where bronze statues were melted down and used for making coin, as under Alexius I and the Latins, no doubt a proportion of tin and zinc were present as well. Some sixth-century pentanummia were of brass, apparently because the weight gap between the nummus and the decanummium, both of them coins of copper, was too small to be conveniently filled by another coin of the same metal (see p. 59). Eighth-century solidi struck at Rome were sometimes of a mixture approximating to potin, a base alloy including a proportion of lead and zinc, and a similar alloy was used for the coinage of Cherson in the ninth and tenth centuries. The lowest denomination of Alexius I's reformed coinage of 1092 was initially made of lead (see p. 227).

Byzantine coinage preserved much longer than did that of Latin Christendom one characteristic feature of Roman coinage, and when it diverged from this it did so in a different fashion. Ancient coins were normally struck in high relief on thick and relatively heavy flans; medieval western ones were thin, of unusually large module for their weight, and struck in low relief. A Roman aureus and an English noble are almost identical in weight, but the noble has a diameter twice that of the aureus and four times its area. Though the early Byzantine solidus and follis were thinner coins than the aureus and sesterius, they were closer to their Roman predecessors than to any western medieval coin. The first breach in tradition came in the eighth century, with the introduction of the new miliaresion, the thin fabric of which was derived, by way of the Arabic dirhem, from the characteristic silver coin of the Sassanians. The gold coinage, however, remained unchanged for another three hundred years. It was only half-way through the reign of Basil II (976–1025) that the diameter was about 25 mm, as against 20 mm at his accession, and under the Comnenids it rose to 30 mm or a little more. By that time the coins were also concave, which rendered them less liable to bending or crumpling. Although the concave fabric is not wholly unknown elsewhere – it was common in the gold coinage of the Kushans – it is one of the most characteristic features of the late Byzantine period, more especially after it had been extended to coins of debased silver as well as those of debased gold.

The Byzantine monetary system was based on the Roman pound, which is customarily taken to equal 327.45 g but may in fact have been slightly less. The duodecimal system took precedence over the decimal and multiples or divisors of 3 and 4 are common. The standard gold coin, weighing 1/72th of a pound or 4 scruples or 24 carats or siliquae, was created by Constantine the Great and was known in Latin as the *solidus* (short for *solidus aureus*) and in Greek as the *nomisma* (short for νόμισμα χρυσοῦν, 'gold coin'). The carat (0.089 g) was too small to be made directly into a gold coin, but it served as a unit of account and payments expressed in terms of it would be paid in silver or copper coin either at fixed ratios laid down by the government or varying ones determined by the state of the market. As a unit of reckoning the solidus was also the equivalent of 6000 nummi or denarii, a ratio enshrined in

the calculations of a fourteenth-century work on Byzantine mathematics but attested also for much earlier times. The carat as a unit of account was accordingly 250 nummi.

In practice matters were less simple, and when for a time the *siliqua* was a silver coin and the *nummus* a small copper one their values could not be held stable at these theoretical figures, so that very different ones frequently existed in real life. A constitution of Valentinian III in the fifth century refers to *solidi* being bought for 7000 nummi and sold for 7200, while Procopius tells us how Justinian altered the value of the *solidus* from 210 folles (i.e. 8400 nummi) to 180 (i.e. 7200 nummi), back to what it had been under Valentinian III. The sizes of the coins in the intervening period suggest that in the early years of Anastasius the *solidus* may well have risen to double this figure, as it probably did again by the end of the sixth century. Later the *nummus* was eliminated from such calculations entirely, but how exactly the *folles* of the Isaurian or early Macedonian periods was related to the *solidus*, or whether any stable relationship existed at all, we do not know.

Much confusion exists regarding the names and values of early Byzantine silver coins. It is customary to term the standard silver coin of the late fourth century, weighing *c.* 1.8 g, a *siliqua*, but there seems good reason to suppose that its real name was a *miliarensis* (Gr. *miliaresion*) – numismatists usually reserve this name for much heavier and rarer coins – and that the *siliqua* at that time was only a money of account. Coins of Justinian struck in Italy with the mark of value CN (i.e. 250) were no doubt *siliquae*, but where there is no mark of value we are usually at a loss how best to describe the various coins. The seventh-century hexagram had its weight (6.83 g) defined by its name (6 grammata or scruples), but we are uncertain as to the exact fraction of the *solidus* it was intended to represent. The *miliaresion* of the Macedonian period was certainly 1/12th of the *solidus*, i.e. a double *keration*, but it only maintained this value by being struck on a token basis – the metallic value of its silver content was much less – and there seems to have been one period in the tenth century when it was reckoned as 1/14th of the *solidus*. The *folles* in the eleventh century was reckoned 288 to the *solidus*, so that the pattern of values was as follows:

<i>solidus</i>	<i>miliaresia</i>	<i>keratia</i>	<i>folles</i>
1	= 12	= 24	= 288
	1	= 2	= 144
		1	= 72

Of these units the *keration* was a money of account, and the system did not tie up satisfactorily with the rival system of reckoning, still used for certain purposes, by which the *solidus* was 6000 and the *keration* 250 nummi.

The framework of the Comnenid monetary system was necessarily very different, since the *folles* no longer existed and the *miliaresion* had joined the *keration* as a money of account. The *Diataxis* of the monastery of the Pantocrator of 1136 and other documents of the period suggest the following scheme for the mid-twelfth century:

hyperpyron	electrum trachea	billon trachea	tetartera	half tetartera
1	= 3	= 48	= 84	= 1728
	1	= 16	= 288	= 576
		1	= 18	= 36

Odo of Deuil's account of money-changing during the Second Crusade (1147) shows that in real life values were often different, and indeed could vary greatly from place to place, while towards the end of the century the ratios of the lower denominations to the hyperpyron had increased appreciably as a result of the debasement of the billon trachea. The miliaresion and the keration continued to exist as moneys of account at the old ratios of 12 and 24 respectively to the hyperpyron; sums expressed in them would be paid in real coin at the current market rates. These moneys of account continued in use during the thirteenth century and under the Palaeologids, right down to the end of the Empire.

It may have been a consequence of the lack of correspondence between theoretical relationships and those of real life that actual marking of values on the coins was very limited in character. The standard gold coin of full weight never had its value marked upon it at all, but many of the light-weight issues of the sixth and seventh centuries had their weights stated on them in terms of carats (OBXX and BOIK, solidi of 20 and 23 carats),<sup>5</sup> though sometimes the mint simply drew attention to abnormalities by some small change in the design, for example, by the marking of coins of 23 carats by stars in the obverse and reverse fields, and users were expected to know how to interpret them. Semisses and tremisses, which were very close to each other in weight and might easily be confused, were differentiated in type, although the difference was sometimes small – for example, an imperial figure holding a cross potent on base instead of a cross potent on globe – and must sometimes have been overlooked. Some of the Italian silver coins of Justinian and Justin II have their values marked in terms of nummi (CN, PKC and PK for 250, 125 and 120, the last evidently as a convenient multiple of 3 folles), and there are isolated silver coins of Carthage with reckonings in denarii after the Vandal pattern. But marks of value are in the main a prerogative of the copper, and even here are limited to the three earliest Byzantine centuries.

The initial idea of using marks of value was due to the Roman Senate, which placed an XL (i.e. 40 nummi) on the coins struck by its authority in the name of Zeno soon after 476, and subsequently an XL or an XX on the two denominations with the legend *Invicta Roma* struck during the Ostrogothic period. Like some other features of the Senatorial coinage it represents a conscious revival of what had been a common practice of the Roman Republic. The example of Rome was followed at Carthage, where the figures used were XLII, XXI and XII, the first two of these apparently because they were convenient roundings-off of the value

<sup>5</sup> For the Greek numerals found on Byzantine coins, see p. 40.

of coins worth a sixth or a twelfth of the notional *siliqua* of 250 *nummi*. Coin finds of the period sometimes contain worn *sestertii* and *dupondii* of the Principate on which have been stamped the numerals LXXXIII or XLII, evidently marking the values at which these coins would be accepted in commerce. When Anastasius took over the system he used the Greek numerals M, K, I and € for multiples of 40, 20, 10 and 5, though his successors sometimes reverted to the Roman forms XXXX, XX, X and V, especially in western mints.<sup>6</sup> It is this series of 40 and its fractions, reinforced under Tiberius II and a few later emperors by a 30 (marked XXX or Λ), that is most characteristic of Byzantine copper coinage, but a few eccentric numerals occur locally. The sequence IB (12), S (6) and Γ (3) was normal at Alexandria, with ΛΓ (33) exceptionally under Justinian I, and IS (16), H (8) and Δ (4) were used at Thessalonica under the same ruler. B or II for 2 occurs on a few coins, and the *nummus* was sometimes marked A. At Cherson, in the early seventh century, we find the *folles* marked H (8) instead of M and the half *folles* Δ (4) instead of K, since owing to debasement it was thought more reasonable to reckon the *pentanummium* instead of the *nummus* as the unit.

The use of meaningful marks of value lasted nearly three hundred years from their introduction by Anastasius to their discontinuance under Constantine V. The immediate successors of the latter continued to use the mark M, but no smaller fractions occurred and the half *folles* of Leo IV was identical in type with the *folles* and simply half its size (see p. 164). Evidently M was by that time regarded as no more than the traditional mark on a copper coin, there being no implication that it stood for 40 *nummi*, and under Theophilus it was replaced by a different reverse and was never revived. In Sicily, however, it continued to be used until the conquest of the island by the Arabs.

Byzantine coins almost never bear the names of the denominations they represent; these are only known to us from the written sources. A few sixth-century coins of Carthage, however, continue the Vandal use of DN for *denarii* and N or NM for *nummi*. The names generally used – *solidus*, *semissis*, *tremissis* in the gold, *miliaresion* in the silver, *folles* and its fractions (half *folles*, *decanummium*, *pentanummium* and *nummus* [*noummion*] in the copper – refer to the denomination as such, not to coins of any particular emperor or issue. Major varieties of these could be qualified adjectivally, but the adjectives easily became names themselves: *histamenon*, *tetarteron*, *hyperpyron* in the gold, *hexagram* in the silver. In the Comnenid and Paleologid periods there was a tendency to multiply adjectives, as in the description of a coin as a *nomisma trachy aspron* (see p. 218). The use of names for individual coins was particularly frequent in periods of progressive debasement, where it was necessary to ensure that debts were settled and payment made in coins of a particular fineness, but sometimes names were devised for coins novel or striking in design. Such names might be based on some detail of the type – for example, *senzaton* (from *sessos*, ‘throne’,

<sup>6</sup> The sequence Rome-Carthage-Constantinople value is not admitted by all scholars.  
for the introduction of *folles* with marks of



used of late ninth and early tenth-century solidi with a seated Christ), *stellatus* (a solidus of Constantine IX with two stars in the field), *hagigeorgaton* (a coin with the effigy of St George) – or on the name of the ruler (*michaelaton*, *alexaton*) or his family (*botaniaton*, *dukaton*), or on his title (*basilikon*, from *basileus*). Some of the terms found in the texts have not yet received a satisfactory explanation.

The range of denominations that were struck at any particular period must have borne a fairly close relationship to the contemporary pattern of prices, but our documentary evidence is too slight for us to explore this aspect of the coinage in any detail. The disappearance of the nummus, the growing rarity of the pentanummium, and the introduction of the 30-nummus piece as a new denomination by Tiberius II provide good grounds for the belief that prices in the late sixth century, reckoned in terms of nummi, must have been much higher than they had been in its earlier decades. We can reasonably infer a lower price level in Italy and North Africa than in the East during the early seventh century from the fact that half folles and decanummia were still being struck in quantity at Rome and Carthage, while they had virtually ceased to be issued at Constantinople. But it is difficult to know whether prices expressed in terms of solidi and *keratia* had altered to a comparable extent, and we do not know how to interpret such phenomena as, for example, the striking of fractions of the solidus and follis in the sixth and seventh centuries and their absence in the tenth and eleventh. Presumably they were not struck in the later period because they were not thought to be useful, but was this due to a change in price levels or to a reduction in the general use of money? The gap between the gold and the copper might indeed be filled by the *miliaresion*, but there was nothing below the follis.

No Byzantine mint documents are known to have survived, and we have in consequence only a very vague impression of mint output. Figures proposed by Brunetti in Italy and Metcalf in England are in part based upon assumptions which many scholars will hesitate to make. In theory, if one knows the number of dies represented more than once in a given sample of coins, it should be possible to estimate, within a very wide margin of error, the total number used for the issue from which the sample was drawn. Further, if one could discover the average number of coins struck per die, multiplication of the two figures together would give an indication of the total size of the issue. Brunetti estimated the number of dies used for the silver coinage of John V during the regency of Anna of Savoy (1341–7) as about 2800, and taking an average of about 1800 coins struck per die he reckoned the total issue at about 5 million coins. Metcalf gives the total output of Alexius I's hyperpyra as about 10 million coins, reckoning between 500 and 1500 pairs of dies and an average output of 10,000 coins per die, while the issue of Theophilus' folles he would put at between 25 and 70 million, reckoning 7500 coins per reverse die. But modern experience shows coin output to be so irregular, owing to variations in the quality and crystalline structure of dies, that the basic notion of a predictable 'average' is of doubtful validity. It is in any case difficult to believe that estimates of Byzantine mint output in the eighth or tenth centuries can be safely deduced from our knowledge of the behaviour of English mints in the later Middle Ages.

## Mint-marks and dates

Byzantine mint authorities made only occasional efforts to indicate where and when coins were struck. The use of specific mint and officina marks – the officinae were subdivisions of the mint – ended in the eighth century and was never revived. The use of dates was introduced by Justinian in 539 and also came to an end in the eighth century. In the thirteenth and fourteenth centuries a few coins are marked with regnal years or indictions, but these are essentially variant forms of privy marks or types and are employed to differentiate issues rather than specifically for dating purposes. Even when dates and mint-marks were in general use they were never applied to the whole of the coinage.

The interpretation of mint and officina marks and of date numerals is in general simple, but occasionally marks or numerals were used which are wholly misleading, and confusion has sometimes resulted through the meaningless copying or repetition of marks which had lost the precise meaning they originally possessed. CONOB is found on gold coins struck at other mints besides Constantinople, and there are sixth-century copper coins with CON which originated in North Africa (see pp. 75–7). The letter K, doubling as mark of value and mint initial, served both Constantinople and Carthage in the 530s, and led Wroth to attribute half folles of the latter mint to Constantinople. Unusual officina letters are sometimes explicable as the result of the mechanical copying of models from elsewhere, but more often they are due to the existence of a space on the coins where there would normally be an officina letter, so that even in a mint where there was no subdivision into officinae the die-sinkers felt that it should be filled with something. Examples of meaningless dates are the XXXX inscribed on the shield held by the Victory on semisses from Marcian to Justinian, and the ANN XXX (subsequently modified to NNN XXX, AN XX, N X, etc.) on the follis and its fractions in the eighth century. The first of these represents a *Vota* formula which originally changed every five years (V, X, XV, etc.) but eventually became an immobilization of the latest one to be used in the long reign of Theodosius II. The second was an immobilization created at a time when it was no longer thought that precise dates on the coins were worth recording and a formula on the traditional pattern was devised to fill what would otherwise have been a vacant space.

CONOB and related formulae form so conspicuous a feature of early Byzantine coinage that they require more detailed treatment. Although some of them incorporate a mint element and occupy the place on the coins normally reserved for mint identification, they are not mint-marks in the strict sense at all.

Originally CONOB had been only one amongst a series of similar formulae combining OB (for *obryzum*)<sup>7</sup> with a mint name (SIRMOB, TESOB, etc.) or (in the West) with COM (from

<sup>7</sup> OB, as used on the coins, was in part a play upon letters, for the numeral 72 is OB in Greek and the solidus was struck 72 to the Roman

pound. Since it occurs on other denominations besides the solidus, however, this meaning can have been no more than a secondary one.

*Comes obrizi*, the official responsible for the gold), in the latter case some further letters (MD, RM, etc.) normally being placed in the field to identify the actual mint. In the later Empire, however, there was a strong tendency to limit normal issues of solidi to the place where the emperor was in residence, so that the striking of gold in the East came in the fifth century to be practically confined to Constantinople, with CONOB as mint-mark. By the sixth century, when mint activity in the provinces was revived on a large scale, the formula had come to be so closely associated with gold coinage in general that it was taken up everywhere, and only a few isolated attempts to revive older formulae or ones modelled on them are known (ROMOB, AAZOB). CONOB was certainly employed at Thessalonica, Rome, Ravenna and Carthage, and probably at other mints as well, but the products of these can only be identified, when this is possible at all, by peculiarities of style or by some incidental detail, such as the indictional dating found on solidi of Carthage from 582 onwards. The maltreatment to which the formula is submitted on light-weight solidi (C+N+B, CONXX, OB\*+\*, OBXX, BOXX, etc.) and on silver (CONOS, COB) shows that a precise meaning was no longer attached to it at all.

The use of mint and officina marks on Roman coinage went back to the middle of the third century and was fully organized in the course of the fourth. It was in large measure a consequence of the abolition of semi-autonomous local minting in the eastern provinces, for given the huge size of the Empire it was impossible to centralize the actual making of coin, and imperial mints had to be set up as replacements for the many city mints which had ceased to exist. With the same general types of coin being struck throughout the Empire it was desirable, for administrative reasons and as a precaution against counterfeiting, to identify the products of each mint by placing in the exergue or the field its initial or most characteristic letters. Originally the mint-marks had been quite simple (ANT, R or ROM, SISC, etc.) but in the fourth century they became more and more complicated, being combined with such elements as SM (for *sacra moneta*), OB or PS (for *obryzum*, *pusulatum*, the technical term for refined silver), and with an officina letter and sometimes an issue mark. Most of these complications vanished in the course of the fifth century, and Byzantine mint-marks consist for the most part of a simple mint initial (letter or syllable) and an officina letter.

The precise character of mint-marks depended in part on the space available – KYZ on a follis might be reduced to K on a pentanummium – and in part on the ingenuity of die-sinkers, who seem to have taken a certain satisfaction in making marks of value serve also as mint-marks or parts of them. Since more information is now available than when Wroth compiled his very useful list, a revised list is given here,<sup>8</sup> in the geographical order of the mints.

<sup>8</sup> It does not include CONOB, since this was used on the gold coins of all mints which struck in this metal. CONOB has the form CONOP on

one issue of Justinian II. COMOB was used instead of CONOB in Italy to the end of the Ostrogothic period.

*Constantinople.* CON, K (serving both as mark of value and mint initial on half folles); also P (for πόλις) on a few coins of Justinian I.

*Thessalonica.* THESSOB, TES, ΘES, ΘEC, OS, Θ, T (on some solidi), S (on some solidi and some sixth-century pentanummia). The S stands for *Saloniki*, the shortened form of the place name which was widely used in the later Middle Ages and in modern times and which is documented in the written sources from the tenth century onwards.

*Cherson.* Monogram of ΧΕΡCONOC (Justinian I), ΧΕΡCΩNOC or ΧΕΡCONOC in full (Maurice), Π (= πόλις) or ΠΧ (= πόλις Χερσῶνος) (Basil I).

*Nicomedia.* NIKOMI, NIKO, NIKM, NIC, NIK, NI, N; also combined with a mark of value as NIK, NIKOM, or NIKOΔ.

*Cyzicus.* KYZ (or KVZ), KY, K; also combined with a mark of value as KVZ.

*Isaura.* ISAVR (Heraclius only).

*Seleucia Isauriae.* SELIΣ, SEL' (Heraclius only).

*Alexandretta.* ALCZANA (revolt of Heraclius).

*Antioch*, called officially *Theopolis* (Θεούπολις) from 528. ANTIX, ANTX, AN; THΕΥPO, ΘVΠIOAS, etc. (see table on p. 67); Ρ, Π, etc. (see same table), i.e. the πόλις of *Theopolis*.

*Jerusalem.* IEPOC OΠ', XCNIKA (early years of Heraclius).

*Cyprus* (presumably Constantia). KVΠPOV, KVΠPΘ, KVΠP', KVΠ, CΠP, often blundered (revolt of Heraclius and this emperor's reign).

*Alexandria.* AΛEZ, blundered to ABAZ, ΠON, etc.; AΛZOB (solidi of Justin II).

*Carthage.* KART, KAR, CAR; KRTG, CRTG, KTG, CT, K, KΓΩ, C.

*Sardinia* (presumably Cagliari). S (from c. 690 to c. 720).

*Sicily* (Catania, Syracuse). SECILIA (Maurice), SCL<sup>s</sup>, SC<sup>s</sup>, SCL, CIK', CI; CAT; CVPAKOVCI, CP. The countermark SCL<sup>s</sup> probably does not refer to any particular locality, the dies having been distributed for use throughout the island. The countermark SC<sup>s</sup> on later coins of Heraclius and the same letters used as a mint-mark on 'Sicilian' folles of Constans II indicate coins intended for the island but actually struck at Constantinople.

*Naples.* NE.

*Rome.* ROM, RM (sometimes monogramatically).

*Ravenna.* RAVENNA, RAVEN, RVEN, RAV, RAB, RA. The traditional form RV was not used after Justinian's reconquest.

The larger mints, during the late Roman and early Byzantine periods, were subdivided for administrative purposes into officinae. Officials called *offinatores monetae* are known from Roman inscriptions of the Principate, and the letters OF occasionally appear on coins, e.g. ones of Theodosius I and his colleagues of the mint of Rome with OF P, OF B, etc. (i.e. *Officina prima, secunda*) in the field. One issue of folles of Constans II has the letters OΦA, for

ὀφικίνα, followed by a numeral.<sup>9</sup> Normally, however, there is no qualification; a simple numeral, usually in Greek but occasionally in Latin, is placed in some convenient position in the reverse field or accompanies the mint-mark in the exergue. On solidi, where the officina letter is placed at the end of the reverse inscription, it is often larger than the other letters and out of line with them, showing that the reverse die was initially cut without any officina letter and this was added subsequently when the die was brought into use. On copper coins the officina letter seems usually, though not invariably, to have made part of the design from the first. The officinae cannot be envisaged as entirely separate workshops, for solidi and occasionally folles with different officina letters are found to share common obverse dies.

The most puzzling feature about the officina organization is its apparent inconsequence. It is not perhaps surprising that Constantinople in the sixth century should have had ten officinae for solidi and only five for folles, since a more elaborate system of control would be required for coins of precious metal. But it is difficult to explain why officina letters on the gold should be virtually restricted to solidi – they occur only rarely on semisses and tremisses – why they are never used on the silver coinage, and why their use on the lower denominations of copper is so erratic. It is of course conceivable that semisses, tremisses and silver coins were in each case struck in only one officina, which consequently did not need identification, but this seems unlikely for the fractional copper, where one issue will have officina letters on half folles and decanummia but not on pentanummia, another on half folles and pentanummia but not on decanummia. One can only presume that a great deal of discretion was left to the mint personnel. It is also at first sight hard to explain why an officina organization for the gold should have been found necessary in the sixth and not, say, in the tenth century. A possible explanation is that in the later period Constantinople was the only mint. Officina letters had not been used on the aurei of the Principate, and their introduction was closely associated with the multiplication of mints striking gold in the later centuries of the Roman Empire.

Officina marks of the sixth to eighth centuries are as follows.

*Constantinople.* On the gold, the normal letters are A–I (= 1–10). Gold coins of the first half of the sixth century with no officina letter at all are attributed to Thessalonica. IA and IB are found under Justinian, but on coins of provincial mints, since, when the striking of gold was begun elsewhere, the new mints were at first regarded as extensions of that of the capital. The full sequence A–I was last used under Leo III. His later solidi, and those of his successors down to the early years of Michael III, have either no officina letter or one in a series used without any numerical significance (Θ or ⊕, X, €, Π; see pp. 156 ff.). During the seventh and early eighth centuries the officina numeral is sometimes followed by a further letter, an

9 One is accustomed to speak of officina letters, but they are in fact numerals. See p. 40.

alternative to the placing of this in the field, but though it is evidently some kind of control mark it is unrelated to the officina organization.

On the copper, the regular officina letters are A–E. Higher numerals (S, Z, H) very occasionally occur on sixth-century coins, but their extreme rarity makes it unlikely that they represent true officinae. Some of the coins bearing them may be contemporary counterfeits.

*Thessalonica.* No true officinae. Letters (E, B, etc.) found on some folles of Justin I and Heraclius are the result of copying coins of Constantinople.

*Nicomedia.* A, B (copper). Higher numerals occur very occasionally, as at Constantinople, but scarcely of regular officinae.

*Cyzicus.* A, B (copper).

*Isaura.* A only (copper).

*Seleucia.* A, B (copper). Very occasionally Γ, Δ or E.

*Antioch.* Four officinae (A–Δ) normally (copper), but there are isolated and inexplicable occurrences of S (= 6) and H (= 8) in the second half of the sixth century. The letter Γ on almost all issues far outnumbers the others.

*Carthage.* On the gold: Γ, I, IA, IB (solidi of Justinian I), A–I (solidi of Justin II and Tiberius II). The IA and IB were envisaged as continuations of the numerical system of Constantinople; the others are perhaps dates, as the A–IE on solidi from the last year of Tiberius II onwards certainly are.

On the copper, S and SO (Justinian, Years 13, 14, and Justin II, Year 8, perhaps standing for *Sola* or *Sola officina: secunda* seems unlikely); PA (? for *Prima*, Justinian, Year 22); A, B, Γ, C, . . . (Justinian, early folles). Probably none of these should be regarded as true officina marks; they were devised to fill in a space where officina marks were usually placed.

*Rome.* A (solidi, folles and half folles of Justinian, but soon abandoned).

*Ravenna.* On the gold: P (= *Prima*); A–I, some at least of these being dates. On the copper: no true officinae, but such pseudo-officina marks as E (Maurice; it stands for 5, doubling the *Anno Quinto* of the date) and A, often blundered into Δ or Θ (Heraclius and later).

The formal dating of Byzantine coins, like the use of mint and officina letters, is virtually limited to the early Byzantine period, though it was briefly revived for a few thirteenth- and early fourteenth-century series. Two methods were in use, on the coins as in everyday life. One was reckoned by the regnal years of the reigning emperor, the other by the indiction, this being a fifteen-year cycle used in the fiscal system and marking the intervals at which tax schedules were, at least in theory, revised. Neither system coincided with our calendar year. The first varied from emperor to emperor and was calculated from the date at which a ruler received the title of Augustus, not from that of the death of his predecessor. The second began on 1 September 312, 1 September 327, 1 September 342, and so on, the cycle repeating

itself every fifteen years (*Indictio prima* = 1 September 312–31 August 313, *Indictio secunda* = 1 September 313–31 August 314, etc.). No use was made of the year of the Incarnation or the era of the Creation, though the latter was that normally used in Byzantine chronicles. Regnal dating on the coins is usually indicated by ANNO, or in one case by VOT (*is*), indictional dating by IND, but there may simply be a numeral without any guide as to which system is being employed. Occasionally *Anno* is improperly used where *Indictione* was intended. Regnal dating is found in most parts of the Empire. Indictional dating is rare outside North Africa, Italy and Sicily in the sixth to eighth centuries, but makes an unexpected appearance at Constantinople under the Palaeologids.

The systematic dating of Byzantine coins resulted from a partial application of Novel XLVII of Justinian of 31 August 537, which laid down that dates in official and legal documents should give the regnal year, the name of the consul, the number of the indiction and the day of the month. Copper coins, being of a token character, presented some analogy to certain types of legal documents, and the decision was subsequently taken to date them by regnal years. The practice must have begun early in 539, at the very end of Justinian's Year 12, for this date is only found on coins from Constantinople and its two neighbours, Nicomedia and Cyzicus; coins from the more distant mints of Antioch and Carthage start with Year 13. At no time were all denominations dated, and the practice was never adopted for the copper coinage of Egypt and only very occasionally for that of Italy. The dating by regnal years of gold coinage at Carthage probably began under Justin II and certainly occurs on solidi of the last year of Tiberius II, with coins having an obverse inscription with his eighth regnal year (ANH) matched with a reverse one giving the indiction (IC). The first regnal year of Maurice (13 August 582–12 August 583), however, virtually coincided with the first year of a new indiction (1 September 582–31 August 583), and this resulted in dating on a purely indictional basis. The formula IN or IND, followed by a numeral, occurs on isolated coins of Cyzicus (Justin I), Carthage (Maurice) and Sicily (Constans II and later). The only clear case of the dating of gold coinage in the East occurs under Constans II, when there is a sequence of Constantinopolitan solidi having Ε, Σ, Η, Ζ (i.e. 5, 6, 7, 8) in the reverse field, but it is possible that some of the enigmatic letters in the reverse field of solidi of the fourth coinage of Heraclius should also be identified as dates. The last properly dated copper coins of Constantinople are those of Theodosius III, but the notion of dating the gold was taken over by the Muslims and the Lombards respectively after Carthage and Ravenna had fallen into their hands. Arab-Byzantine dinars and their fractions from North Africa and Spain are sometimes dated INDII, INDIII, etc. (see p. 148), and the solidi and tremisses struck by Aistulf (751–6) at Ravenna have the letters Ζ or Η, corresponding to Indictions 7 and 8 (= 753/4, 754/5), in the reverse field.

Mint, officina and date marks of the sixth to eighth centuries are sometimes accompanied by pellets, crosses, stars, supplementary letters and the like. A star had a traditional association with occasions of rejoicing, and where it is found on dates which overlap with a consulship (e.g. folles of Justin II of Carthage dated Years 1 and 2) or with accession or

consulship anniversaries (e.g. folles of the tenth and eleventh years of the same ruler) it seems clear that such occasions were envisaged, so that the coins can be more closely dated than the simple regnal year would allow. The other sigla may be issue marks of some kind, but until the evidence is brought together and critically examined their meaning must be left uncertain.

During the Macedonian and Comnenid periods there are few marks on the coins that can be regarded with certainty as intended to indicate either mint, officina, date or issue. In the Macedonian period there are occasional variations in inscription or design – two distinct forms of inscription on some solidi of Leo VI and Nicephorus II, the presence or absence of a pellet on the shaft of the cross held jointly by two emperors – which may perhaps differentiate between officinae, but the only argument in favour of such an hypothesis is that they repeat themselves from reign to reign and this is perhaps not conclusive. The many varieties of ornament found on the early solidi of Basil II and on Class A2 of the Anonymous Folles may have been changed annually, but this is at present no more than an hypothesis. Under the Comnenids there is much variation in the form of the emperor's crown and the details of his costume. Some of these may have no more significance than the varying details of the tufa of Theophilus, which were due to the whim of die-sinkers and are only helpful in die classification, but others, as Hendy, following in Schindler's footsteps, has argued, were used to distinguish between the work of different officinae.

In the thirteenth and early fourteenth centuries more distinctive privy marks of various kinds again come into use. Under the rulers of Nicaea and Thessalonica, and even more conspicuously during the reigns of Michael VIII and his successors, the types on the hyperpyra and the silver coins are often accompanied by symbols (cross, star, crescent, etc.), letters, or monograms. These present obvious analogies with those which in many western mints, more particularly in Italy, were used to identify the magistrates or mint officials responsible for each issue of coin. Such officials were changed at regular intervals, for example, every six or twelve months, and where mint records or registers have survived we sometimes know their names and a good deal about their duties. In Venice, a mint likely to have been influenced by Constantinople, the *massari* (i.e. *magistri*) *della moneta*, who were foremen rather than officials, began to place their privy marks on the grossi in the late 1230s, under the doge Jacopo Tiepolo, and the *Capitulare massariarum monete* of 1278 refers to the *signum in moneta quam fieri faciemus, ad hoc ut cognoscatur quod facta sit tempore nostri officii de moneta*. At first these marks were very simple – a pellet, annulet, cross or similar sign variously placed in relation to the seated figure of Christ on the grosso – but in the mid-fourteenth century these were replaced on half grossi by the initial of the moneyer's first name ('Et sculpiri debeat in ipsa moneta prima sillaba nominis massari', e.g. P for Pietro Contarini in 1348) and from the 1420s onwards we find the initial of the surname also (e.g. TM, Tomaso Mocenigo in 1423). Only where documents are available, as at Venice, is there any hope of actually identifying the individuals involved, but further study of the sigla on Byzantine coins may eventually allow us to establish their order and arrange the coinages involved rather better than can be done at present.



## Types, inscriptions and accessory symbols

### OBVERSE AND REVERSE

Numismatists differ somewhat in the meanings they attach to the terms 'obverse' and 'reverse'. The traditional sense of 'obverse', still retained by many scholars, is that of the coin face marked by the principal type (e.g. by the head of a ruler), the 'reverse' being that marked by the secondary type (e.g. by an heraldic symbol). This can lead to ambiguity, since the distinction between primary and secondary types is not always well defined, and it is therefore now more usual to regard the side of a coin struck by the lower die as the obverse, and that struck by the upper die as the reverse. The position is complicated at Byzantium by the use, in the middle and late periods, of religious ruler types (Christ, the Virgin) as well as secular ruler ones. The relationship between these requires some discussion. The side that, under Justinian II and again from the ninth to the fourteenth century, is treated in the older books as the reverse is now customarily described as the obverse, and indeed bore what in the eyes of users at the time was the principal type.

The relationship can be most clearly seen from what occurred under Justinian II. During most of the preceding century the obverse type, on the gold coins, had been the imperial bust, while the reverse type was a cross potent, either on steps (*solidus*), on a globe (*semissis*), or on a plain base (*tremissis*). The officina letter was placed at the end of the reverse inscription, on the same side of the coin as the cross. When the bust of Christ came to be introduced under Justinian II [298, 308], the standing emperor was shown holding whichever variety of cross was appropriate to the denomination, and the officina letter was transferred to the end of the accompanying inscription with the imperial name and title. The emperor had in fact removed himself to the reverse face of the coin, leaving, as was only appropriate, the place of honour on the obverse to his heavenly Master. This relationship was reproduced when the bust of Christ was placed on the *solidi* of Michael III in 843 [771, 772] and it continued thereafter, being underlined by the fact that when an inscription runs from one face of a coin to the other – e.g. ΚΕΒΟΑΛΕΖΙΩ / ΔΕCΠΟΤΗ ΤΩ ΚΟΜ, Κύριε βοήθει Ἀλεξίῳ δεσπότῃ τῷ Κομνηνῷ ('O Lord preserve the emperor Alexius Comnenus') – it begins on the face with the heavenly effigy and ends on that with the imperial one. On the concave coinage, also, it is very evident that the convex face, which bears the image of Christ or the Virgin, is that which would have been struck by the lower die normally used for the obverse. The distinction was not always respected in everyday speech – George Pachymeres speaks of the walls of Constantinople protected by the Virgin as being shown 'on the back' (ὀπισθεν) of the hyperpyra of Michael VIII – and it seems to have broken down in the fourteenth century (see p. 28). But in general one can say that where the representations of Christ, the Virgin, or one of the saints forms the type – but not when one of them is shown playing some active role, such as blessing an emperor or presiding at a marriage – this face was technically the obverse of the coin.

Three other groups of Byzantine coins raise similar problems. One comprises the

miliaresia of the Isaurian, Amorion and early Macedonian periods, which on one face have normally an imperial inscription in four or five lines, on the other a cross potent on steps [Pl. 36]. Wroth treated the latter as the obverse, but it should be the other way round. The imperial inscription is replacing the imperial bust or busts that had been customary on the hexagrams of the seventh century, and an imperial bust had always taken precedence of the cross. That this interpretation is correct is shown by the solidi of the sole reign of Artavasdus [635], when the cross and accompanying inscription of the miliaresion are transferred to the solidus and appear on its reverse. On miliaresia and their fractions of the late tenth and eleventh centuries, however, when the bust of the Virgin or some similar representation of a religious character replaces the cross, the side bearing it, by analogy with the solidus, becomes the obverse.

The second ambiguous group of coins consists of the solidi and their fractions of the Isaurian period which have on one face the bust or seated figures of one or more ancestors of the reigning emperor. Wroth's treatment of these was inconsistent: under Constantine V he regarded the side of the coin with the bust of Leo III as the obverse, but under later emperors the corresponding side becomes the reverse. Vegliery with greater consistency has argued that in this coinage the side with the reigning emperor is always the reverse, because in the hierarchy of imperial costumes the chlamys, the imperial purple cloak, is inferior to the loros, a richly embroidered scarf wound round the body, and it is that that Constantine V wears. Although his basic assumption is open to doubt – there are no good grounds for regarding one costume as superior to another – his conclusion is supported by the fact that on some semisses and tremisses of Constantine V it is he who holds the cross whose form denotes the denomination of the coin. On the other hand, on the folles and fractional copper, the side with the bust of Leo III bears also the mark of value. There is thus a certain conflict of evidence, but on the whole it seems best to treat as the obverse the side of the coin with the bust of the reigning emperor.

The third ambiguous group is formed by the silver coins of the first half of the fourteenth century. Whitting's analysis of a large hoard of basilica of Andronicus II and Michael IX suggested that the side of the coins with the seated Christ was that struck by the upper die, for it is the one marked by the deeper impressions, is the one more frequently damaged by double striking, and seems to have involved more dies than the side having for type the two standing emperors. My own preliminary study of the hoard of Anna of Savoy's basilica at Dumbarton Oaks points in the same direction, and Bendall, whose knowledge of Palaeologid coins is unrivalled, treats the 'imperial' side as the obverse in his monograph on those of Andronicus II and his successors. Two brockages in a silver hoard of John VIII give support to this view, for on these it is the 'imperial' side that is incuse, a feature normally resulting from a coin having accidentally adhered to the upper die and not to the lower one, where it would be noticed and removed. Possibly, in these later centuries, there was no regular practice at all. The numismatist, however, has to aim at consistency, and in Chapter 9 it has seemed best to make no change from the custom, continued from the middle Byzantine period, of treating the 'religious' side of the coins as the obverse.

## SECULAR RULER TYPES

The Byzantine emperor normally figures on the coins either alone or in association with some heavenly personage or earthly colleague. In the latter cases his costume and attributes will not necessarily be different from those with which he is shown when alone, but his position on the coin will assume considerable importance.

Up to the tenth century the normal imperial effigy takes the form of a facing bust; it is only when the emperor is in association with a colleague that he is sometimes shown standing or seated (e.g. Justin I and Justinian I, Justin II and Sophia, Heraclius and his sons). In later centuries a single standing figure becomes more frequent, though the type of facing bust was never abandoned. On Palaeologid coins he may occasionally be shown kneeling (Michael VIII) or on horseback (Manuel II). The profile bust, characteristic of the Principate and of the early Christian empire, survived into the seventh century on semisses and tremisses and on some of the copper coinage, but after Justinian's introduction of his facing effigy on the follis and its fractions this form of imperial representation can be said to dominate the coinage as a whole.

The change from profile to facing bust has important cultural implications, for on the coins as in other forms of art it was intended to emphasize the withdrawal of the ruler from contact with his subjects and his elevation to a higher and more divine plane of existence. It was a visual representation of the serene impassivity expected of a semi-divine emperor and was given literary form in a famous passage in which the historian Ammianus Marcellinus describes the triumphal entry of Constantius II into Rome in 357. Surrounded by heavily mailed cavalry and infantry and seated high in a golden chariot adorned with precious stones, the emperor held himself rigid and immobile, 'as if his neck were in a vice, keeping his gaze straight ahead, turning his face neither to the right nor to the left', paying no attention to the jolting of the chariot and never moving his hand to touch or wipe his face or even to acknowledge the acclamations of the crowd. The person of the emperor, as God's representative on earth, had been so overshadowed by the majesty of his office that he was no longer subject to the weaknesses of humanity. Constantius II was capable of using the expression 'My eternity' when feeling more than usually conscious of the sublimity of his earthly role.

It is this particular form of political ideology that explains the rarity of portraiture on Byzantine coinage. Characterized portraiture is technically very difficult to achieve for a facing bust in low relief, but that there was no desire to depict the individual emperor, as opposed to the occupant of the imperial office, is shown by the fact that even where the profile bust was still used in the sixth and seventh centuries it was not a portrait but a conventional representation, carrying on without perceptible change from one emperor to the next. The only exception consists of some semisses and tremisses of Phocas which show him with a beard, and this only because he tried to make of his facing bust a portrait also. Almost the only detail that could easily be brought out on a facing bust in low relief was a prominent beard, and it is the emperors thus characterized – Heraclius, Constans II, Leo VI, Romanus I, Constantine VII, Constantine VIII, Constantine IX, Andronicus I – who share

with child emperors and their rounded faces almost the sole claims to characterized portraiture that can be found. But in general we need not look for likenesses, and over several centuries the possession of a beard and moustache was simply intended to mark off the senior from the junior emperor whether it corresponded to reality or not.

The emperor's office was shown by his costume and insignia. The costume can be conveniently divided into the three categories of civil, military and consular, characterized by the *chlamys*, by armour with or without a *paludamentum*, and by the *loros* respectively. The *chlamys* was a long, magnificently embroidered purple cloak reaching to the ankles. It was fastened at the emperor's right shoulder by a *fibula*, a circular brooch with three pendants, and was usually decorated by two squares of elaborately patterned cloth known as *tablia*. A good impression of the *chlamys* can be obtained from the mosaic of Justinian in San Vitale at Ravenna, where the *tablion* is decorated with green birds in red circles against a gold background. The *chlamys* was worn over a *divitision*, which was a belted tunic with long close-fitting sleeves, the details of which are usually not clear on the coins. Armour consisted of a *cuirass*, which on coins takes the form of plate or scale armour, with the *ptyrges* – a kilt of leather or metal strips – below. The *paludamentum* was a military cloak similar in form and colour to the *chlamys*, but distinguished from it by the absence of *tablia*. Finally, the *loros* was a particular development of the ancient *toga*, which had been a voluminous cloak wound round the body instead of being fastened at the shoulder. It was elaborately decorated, more particularly with broad bands of jewelled and embroidered squares along its two outer edges, and it was these which eventually survived as the scarf-like *loros* of the early Byzantine period.

In the sixth century the facing bust of the emperor is usually shown wearing armour, helmet and shield. Under Maurice a *paludamentum* is often worn as well; when this is so, despite the fact of its being thrown back over the emperor's left shoulder, it conceals the shield and most of the *cuirass*. Tiberius II preferred the consular costume, and both he and Phocas are shown wearing this on most of their copper coinage, though only exceptionally on their *solidi*. Seated figures, on sixth-century coins, are normally shown wearing a *chlamys*. Where the type is a profile bust, this is shown with a *paludamentum*; although the *cuirass* is completely covered, the *ptyrges* which protected the upper arm are sometimes visible, and there is no *tablion*. The other chief insignia of imperial office are the diadem and the crown, originally distinct – the crown was a symbol of victory rather than sovereignty – but by the early Byzantine period virtually interchangeable. From Justinian I onwards the emperor is usually shown holding a *globus cruciger*, but this, like the *globus* surmounted by a Victory in the right hand of Justin II, seems to have been of a purely symbolic character, as was the globe which Roman emperors are sometimes shown holding back to pagan times, and had no existence as a material object. It was indeed not until 1014, when Pope Benedict VIII had one made as a present for the emperor Henry II at his coronation, that this familiar object on Byzantine coins achieved a real existence, to become in due course one of the chief symbols of western European royalty. Tiberius II holds the emblems appropriate to the

consular office, the mappa or fold of cloth which was used to signal the start of the games, and the scipio or eagle-topped sceptre. The latter is replaced on Phocas' coins by a short cross-sceptre, whose existence is otherwise known to us from consular diptychs and from descriptions of ceremonies in the written sources.

The subsequent developments of imperial costume and insignia must be described very briefly. Armour went out of fashion in the seventh century. Although employed on much of the copper it disappeared from the solidus in 613 and was only briefly revived by Constantine IV and again by Tiberius III. After the latter's death (705) it was not again used for three and a half centuries. Constantine IX's armoured effigy on his miliaresia seems to have gone without comment, but when Isaac Comnenus, ascending the throne in 1057 as representative of one of the great military families of the Empire, ventured to have himself shown on the coins in military costume, he was criticized for his impiety in hinting that it was through his sword, and not through divine favour, that he had achieved power (see p. 200). Later emperors, however, are frequently shown in armour, more especially in association with such military saints as St Theodore and St George. The place of armour was largely taken by the chlamys, introduced by Heraclius on his second series of solidi (in 613) and very clearly depicted on those of his final coinage, when the standing figures of himself and his two sons [276] are each shown wearing a chlamys with a lozenge-shaped tablion decorated with pellets or occasionally with a cross. After Justinian II reintroduced the loros [298] – there were several decades during which, as a result of the lapse of the consular office in 539, it rarely appeared on the coins – the chlamys and loros between them for several centuries became the two typical forms of imperial costume.

The victory of the loros was accompanied by a change in its character, for the 'toga' element in it disappeared and only the broad border survived in the form of a very long and richly jewelled scarf. Wroth misunderstood its nature and called it a lozenge-patterned robe, but it had ceased to be a robe at all. The change is first apparent on the solidi of Justinian II, where the garment is shown as a scarf wound round the body in a complicated fashion: straight up in front, over the emperor's right shoulder, under his right arm, across the front of his body, over his left shoulder, across his back, and finally coming out in front of the body at his right hip so that the end could hang over his left forearm. This extremely complicated pattern is often rather obscure on the coins and was not always understood by the die-sinkers, who were on occasion prepared to reverse it, for reasons of symmetry, in an impossible fashion, but it can be clearly worked out from the famous ivory of Constantine VII in Moscow. In the late ninth century, however, it became so inconvenient that it was transmuted into a single robe, consisting of a richly jewelled front portion hanging straight down from the shoulders – Wroth's 'robe of square pattern' – and an equally elaborate but much longer portion behind, which could either hang as a train or, more usually, be pulled across the right side of the body to hang over the left forearm, as the end of the old loros had done. This modified loros and its many variations are amongst the most prominent features of imperial costume in the last centuries of the Empire.

Of the imperial insignia, diadem and crown coalesced with elements derived from the helmet in a fashion which is not very clear and which sometimes defies satisfactory description. The trefoil ornament which originally decorated the large stone in front of the diadem was replaced in the course of the sixth century by a cross, and the 'tails' of the diadem, hanging down from the knot by which it was tied behind the head, were eliminated. From each side of the crown there hung down short pendilia, wires or chains with terminal ornaments which came to be regarded as an essential feature of the imperial crown in the same way as the three pendants were of the imperial fibula. Empresses had a characteristic crown with pyramids or spikes and very long pendilia – they were technically termed *prependulia* – which hung down below shoulder level. The *globus cruciger* remained unchanged as a notional symbol though the cross on it sometimes assumed a patriarchal form [e.g. 812] and occasionally, on some coins of the tenth century, was replaced by the trefoil ornament [e.g. 827]. The eagle-headed *scipio* last appears on coins of Philippicus [303] but other forms occur, particularly on coins of the eleventh century: a simple cross-sceptre, a sceptre having a cross with a leaved base, a *labarum* with its top marked with the Christogram, and so on. Whether all these varieties existed as real objects must be doubted; in the case of the *labarum*, at least, it seems unlikely. Another imperial insignia was that which is known as the *akakia* or *anexikakia*, which was in part a development of the consular *mappa* and was regularly referred to under this older term by Wroth. It was a short hollow cylinder with jewelled ends containing a little dust, intended to remind even emperors of their mortality. It first appears in a distinct form on the coins of Leontius [299], and remained a major element in the imperial insignia almost to the end of the Empire. A fourteenth-century Italian writer compared it to a pestle, but at an earlier period, when it is shown with knobs at both ends, it much more closely resembled a rolling pin.

When an emperor is shown on the coins with a colleague or colleagues their respective rank is made clear by their positions. Where there are two emperors the senior emperor takes his place on the left, from the spectator's point of view; where there are three, the senior emperor appears in the centre, the second on his left and the third on his right [cf. 276, 287]. An Augusta, where there were two figures, appears on the spectator's right; where there are three she takes the junior position, after the heir to the throne. Such distinctions often coincide with those of size – a child colleague will usually be shown smaller than the senior emperor – but not always. Constantine VII has on some coins the place of honour senior to Romanus I, though as a child he is shown as the smaller figure [785]. Another convention frequently used as an indication of status was that of showing the senior emperor as bearded, his junior colleague as beardless. When two emperors are shown holding between them a cross or similar object it is usual for the senior emperor's hand to be placed above the junior one's, but there are too many exceptions to justify our regarding this as a formal practice. Where an emperor is shown in company with one of his heavenly superiors the latter naturally takes precedence: the Virgin appears to the left on coins of Nicephorus II [791].

These rules are only valid, however, when simple facing effigies are envisaged; whenever any activity on the part of any personage is involved they are immediately modified, for here

something other than precedence has to be taken into account. Christ or the Virgin can only crown the emperor with their right hand; they therefore have to be placed on his left, i.e. on the right of the coin from the spectator's point of view [e.g. 792]. The same is true of a saint handing the emperor a sword, or the Virgin handing him a cross; though this could be done by showing the heavenly figure in virtual profile on the spectator's left, like St Demetrius on coins of Alexius I [1026], it was easier to preserve frontality and place the saint on the right. It is such considerations which explain why on so much later Byzantine coinage the emperor appears to take the place of honour on the spectator's left, with precedence even over a heavenly personage. Though there are some apparent exceptions to the general rule, as when Eudocia Macrembolitissa has the place of honour on folles of Constantine X [995], the Byzantine mint was normally attentive to the requirements of protocol and in some reigns, for example in the long and complicated one of Constantine VII, the arrangement of the figures on the coins may throw much light on the relations between the emperors themselves.

The imperial monogram can also be considered a secular ruler type, since it sometimes takes the place of the imperial effigy and can be construed as representing it. It involved some or all of the letters in the ruler's name, this being usually in the genitive but sometimes in the nominative case. The monograms fall, broadly speaking, into three groups, which may be conveniently termed (1) 'box' monograms, in which the construction is built up round some letter of squarish shape, such as N, H, Z, (2) 'cross' monograms, in which the letters are attached to the arms of a cross, and (3) 'bar' monograms, in which the unifying element is a single upright letter like an **h** or T. There is a tendency for box monograms to be early (fifth–sixth centuries) and bar ones to be late (seventh–eighth centuries), but the distinction is not an absolute one and some monograms (e.g. a common one of Heraclius) can be construed as falling under either heading. Cross monograms do not appear to occur before the middle of Justinian I's reign. The more elaborate monograms found on coins of the sixth and seventh centuries are often identical with those used for other purposes (e.g. as hall-marks on silver plate, authorization marks on weights, even architectural decorations), but it does not seem that any single monogram was necessarily regarded as 'official' and of some emperors there are several different varieties on the coins.

The great advantage of monograms as coin types is that they could include in a small space long names (Theodosius, Justinianus), double names (Mauricius Tiberius) and even pairs of names IOVCTINOV KAI COΦIAC. Even in full they are not always free from ambiguity – exactly the same letters occur in the names of Anastasius and Justinianus – and they are usually much abbreviated. As main coin types in the fifth and sixth centuries they are practically limited to nummi and pentanummia – their earliest use is as the reverse type of a nummus of Theodosius II – but as subsidiary symbols they frequently occur on folles. They are sometimes ingeniously linked with marks of value or other symbols. A table of the chief forms of imperial monograms found on coins of the sixth, seventh and eighth centuries is given on p. 34. For those found on coins of Cherson of the ninth and tenth centuries, which form a separate group, see pp. 187–8.

Table 1 Imperial monograms, sixth–eighth centuries

Ruler	'Box'	'Bar'	'Cross'
Anastasius I, 491–518			
Justin I, 518–27			
Justinian I, 527–65			
Justin II, 565–78 (alone)			
(with Sophia)			
Tiberius II, 578–82			
Maurice Tiberius, 582–602			
Phocas, 602–10			
Heraclius, 610–41			
Heraclius Constantine, 613–41			
Constans II, 641–68			
Constantine IV, 668–85			
Justinian II, 685–95			
Leontius, 695–8			
Tiberius III, 698–705			
Justinian II, restored, 705–11			
Philippicus, 711–13			
Anastasius II, 713–15			
Theodosius III, 715–17			

This does not take account of minor variations (e.g. in the reversal of letters or their precise placing) that sometimes occur. The emperor's name is sometimes combined with D (or DN), or with a mark of value.

#### RELIGIOUS RULER TYPES

Religious ruler types are in part pagan, in part Christian. The pagan ones, which do not outlast the seventh century, consist of a Victory or a seated representation of Constantinopolis. The Christian ones consist essentially of the cross or Christogram – the latter is the equivalent of an imperial monogram and the former was an accepted substitute for the image of Christ – or the figures of Christ, the Virgin or one of the saints. Many religious ruler types are purely symbolic, but others are representations of such material objects as the cross erected on Mount Calvary by Theodosius II in 420, and the mosaic of Christ in the Chalkê–



it may originally have been a statue – at the entrance to the Sacred Palace at Constantinople. In some cases these can be identified by the inscriptions on seals or later paintings or indeed on the coins themselves, but there is often some ambiguity in the labels and contemporaries seem to have treated the identifications in a rather casual fashion.

The chief surviving pagan type was the Victory, which appears on coins of the early Byzantine period depicted much as in Roman times – advancing towards the spectator, running to the right or left, holding a wreath, and so forth – but partly Christianized by being given a globus cruciger. Though the Victory must have long since lost the religious significance that it had still possessed in the time of Symmachus, Justin I thought it expedient to convert the profile Victory on the solidus into a facing angel, the change of sex being shown by the disappearance of the high girdle beneath the breasts, but on the lower denominations of gold and on coins of other metals the figure was left unchanged. It was, appropriately, under Heraclius that a Victory was used on Byzantine coinage for the last time, as the main reverse type on a small silver coin struck at Carthage to celebrate the emperor's triumph over Phocas, and as a subordinate element – a Victory crowning the emperor – in the type of a ceremonial silver coin struck at Constantinople to celebrate his much greater triumph over Persia [325]. The intention behind the design underwent no change – the coin inscriptions continued to refer to the Victory of the Augusti – and the angel was no doubt intended to represent the Archangel Michael, captain of the hosts of heaven, as we know from coin inscriptions was the case on Lombard coinage in Italy.

The seated figures of Roma and Constantinopolis – the latter was normally distinguished from Old Rome by having her right foot on the upturned prow of a ship – had played a prominent role in late antique art, but in the Byzantine period only one of them occurs on the coinage, during the reigns of Anastasius I [69–71] and Justin II [22]. A half-length figure of the same personification occurs on some of Justin's silver coins of Carthage [50]. A passage in John of Ephesus, alluding to the fact that Justin earned public disapproval by placing on his coins a figure which was usually compared to that of Venus, underlines both a general recognition of the existence of pagan traditions and the absence of any clear notion of what they really involved.

The use of the cross as a main coin type long preceded the introduction of personal representations of Christ or the saints. It always remained in the East a strictly religious symbol, so that in Byzantine art it never underwent the extraordinary proliferation of forms which it did as an heraldic emblem in the West. There seems in consequence to have been no technical vocabulary in Greek to describe its few variant forms, and the terms used by numismatists are borrowed from western usage. The four standard types are the plain or Latin cross, the cross potent, with bars at the ends of each arm, the patriarchal cross, with two cross-bars, and the cross calvary or cross on steps. Occasionally the cross has an *alpha* and *omega* suspended from its arms, and in the tenth and eleventh centuries we find a cross on steps with a medallion containing either a bust of Christ [800] or that of the emperor at its centre [804]. The cross on a leaved base, though occurring early in other forms of Byzantine

art, only appears on coins in the late eleventh century [991], though a move towards it was made on some late *miliaresia* of Basil II [954]. Its significance was that of the life-giving powers of the tree to which Christ was nailed. The first appearance of the cross as a major element in the design was the richly jewelled emblem supported by a Victory on *solidi* struck in or about 420, when it represented the monument recently erected at Jerusalem by Theodosius II. It never quite lost this identity, for even the plain cross was often shown as a row of pellets, i.e. jewels, and the cross on steps introduced by Tiberius II and forming the main *solidus* type of the seventh century is to be understood as the cross standing on the hill of Calvary. The use of the cross as a main type, other than as a symbol held by one or more figures, disappeared on gold coins with Theophilus, the last Iconoclast emperor.

The Christogram, though it appeared as a major coin type as early as the reign of Magnentius in the mid-fourth century, plays a much less important role than the cross in Byzantine times. It appears in three forms, (1)  $\text{✠}$ , *Chi-Rho*, the monogram of I XP, i.e. Ἰησοῦς Χριστός, (2)  $\text{✡}$ , which is usually described as a six-pointed star but is really the same monogram with initials only and no *rho*, and (3)  $\text{✞}$ , a compromise between a cross and the *rho* element in the monogram. To these may be added  $\text{✧}$ , which is usually described as an eight-pointed star but was perhaps intended as a combination of a Christogram with a cross. The fact that the second variety has often the form  $\text{✡}$  shows that those using it had little idea of what it originally represented, but the true nature of the various forms without a *rho* is apparent from the fact that the ends of the strokes are often rounded and sometimes even barred, while on true stars they would have been pointed. Christograms are usually either accessory symbols or surmount a staff or globe held by emperor or angel, but occasionally, as on some Italian silver coins of the sixth century [59, 60], they become the major type.

The bust of Christ was first introduced on the coins under Justinian II, initially as the heavily bearded figure of the Pantocrator [298] familiar to us from Byzantine icons, and later as a youthful Syrian Christ with curly hair and short beard [301, 302]. The first effigy was reintroduced under Michael III shortly after the restoration of images in 843 [771] and subsequently became the regular type, though a bust of Christ as a child, that called by art historians the Christ Emmanuel type, was introduced, with obvious reference to his own name, under Manuel I [1079]. The details of the older representation of Christ are very varied, but fall essentially into three groups which can be identified, even when there is only a bust, by the fashion in which the Gospel Book is held by Christ: when he is standing, the book is held from below [e.g. 782]; when he is seated, the book rests on his knee and is steadied by his hand on the upper or outer edge [e.g. 784]; when he is leaning forward and looking down on the world (this occurs only as a bust: it is the typical Pantocrator figure which normally occupies the upper part of the central cupola in Byzantine churches from the eleventh century onwards), the book is held from below but with the fingers and thumb wide apart, as if to prevent it from falling [e.g. 791]. Within these main classes further variations occur, notably in the form of the throne where Christ is shown seated – it may be backless or have a lyre-shaped or square back – and in the gesture of benediction, Christ's hand being

sometimes raised to shoulder level, sometimes stretched out to his right in a fold of his cloak, and sometimes held vertically in front of his body. Several of these varieties are with varying degrees of probability believed to represent particular icons in the palace or in the churches of the capital.

A bust of the Virgin first appears on solidi of Leo VI [776], and her half-figure, initially side by side with the emperor (in the place of honour) and subsequently crowning him (with the emperor in the place of honour), under Nicephorus II [791, 792]. From then onwards either the bust or the standing figure of the Virgin is one of the commonest Byzantine coin types. Three icons, the *Nikopoios*, a bust of the Virgin holding a medallion of Christ [953], the *Hodegetria*, the Virgin standing with the infant Christ on her left arm [955], and the *Hagiosoritissa*, the Virgin normally standing half-right, with hands raised [1084], are easily recognizable. The *Blachernitissa*, the icon which formed the palladium of the city, is less certainly identifiable. Though the inscription HBAAXEPNITICA, i.e. ἡ βλαχερνίτισσα, actually occurs on silver coins of the mid-eleventh century [957, 958] showing the facing bust of the Virgin *orans*, with raised arms, the term is more generally applied to one in which she has in front of her a medallion of Christ. On the hyperpyra of Michael VIII and Andronicus II her half-length figure is shown surrounded by the walls of the city of which she was the protectress [1288].

Most of the saints appearing on Byzantine coins are either the name saints of individual emperors or the most venerated military saints, St George, St Theodore and St Demetrius. St Tryphon and St Nicholas first appear on coins of the Empire of Nicaea, and St Eugenius is limited to those of Trebizond. The centralization of minting at Constantinople was in fact a bar to the appearance of local saints, though St Demetrius could double his military claims with those of local veneration at Thessalonica. The first saint to appear was St Alexander on solidi of the emperor Alexander (911–13); he is shown [778] as a bearded figure without nimbus, crowning the emperor. If it were not for his simple costume one might assume that he was intended to represent the patriarch, but the literal scene of a coronation was one which Byzantine emperors carefully avoided on their coins. After that there is a gap of a century, until the emperor Michael IV shows himself with the winged figure of St Michael [909]. St Demetrius appears under Alexius I, St George under John II. These saints are normally dressed in military costume and carry a shield and a sword or spear; they can usually be identified by the inscriptions. An exceptional and very striking coin design is that of the emperor and St Demetrius holding a representation of the city of Thessalonica [1210].

#### SUBSIDIARY TYPES

The two commonest types on Byzantine coins which do not come under either of the headings just discussed are marks of value and inscriptions in several lines across the field.

The use of the mark of value as the main reverse type of the copper coins is the most striking feature of Anastasius I's reforms. It was a revival of one of the most sensible aspects of

ancient republican coinage, though in Roman times the marks of value had been subsidiary to other elements in the design. Its immediate model was provided by North Africa, where marks of value had been extremely prominent on the Vandal coinage. Although some mints, notably Carthage in the sixth and seventh centuries, liked from time to time to reduce their prominence in favour of more interesting designs, a mark of value remained the most prominent reverse type on most of the copper coinage down to the reign of Michael II. Occasionally it is accompanied by an indication of the units involved, DN (for *denarii*) or NM (for *nummi*) at Carthage, perhaps AP (for ἀργύρια, 'silver coins') at Thessalonica.

It is generally assumed that the use of an inscription in several lines across the field, apart from a few words surrounded by a wreath which were Roman in inspiration (e.g. VOT||XIII, AME||NITA||SDEI), was copied from Islamic coinage. The practice began with Leo III's miliaresia and the inscription LEON||SCONST||ANTINEE||COEYbA||SILIS ('Leo and Constantine, emperors in God'), and an imperial inscription in several lines remained the normal obverse type of the silver down to the eleventh century [Pls 36, 44, 54]. Under Theophilus the use of similar inscriptions was taken over by the folles in place of the traditional mark of value M. On the Anonymous Folles of the tenth and eleventh centuries, instead of a straightforward inscription with the name and title of the emperor or emperors, the type became a religious inscription (e.g. +IhS4S||XRIST4S||bASILEY' ||bASILE'), sometimes inserted into the arms of a cross (e.g. ISXS||bAS ILE ||bAS IL or IC XC ||NIKA). This use of inscriptions as main types, however, practically went out with the eleventh century, and never reached the gold at all.

Little would be gained by trying to catalogue here such other types, or particular elements in the type, as occasionally appear. One worth noting in the early coinage is the occasional use of a wreath, an inheritance from Roman times and indeed peculiar to western issues; a wreath with a linear or dotted circle inside it is even limited to Carthage. Sometimes the 'wreath' can be better described as a pseudo-wreath, since it has neither 'top' nor 'bottom', i.e. the usual circular brooch at the top and the X at the bottom, where the two sides of the wreath are tied together, are absent, and the 'leaves' of which it is composed all run the same way. The nearest approach to a wreath in eastern coinage is the wreath-like border on some of Maurice's consular issues of Constantinople and Nicomedia of Years 20 and 21.

On coinage of the thirteenth, fourteenth and fifteenth centuries, western influence is sometimes evident. There are coins of Andronicus II with a cross and four pellets, surrounded by an inscription in large letters with an initial cross, which are clearly modelled on some Frankish denier, and the design of the heavy silver coinage of the later Palaeologids is based on that of some derivative of the gros tournois. A survey of these later types, however, is best reserved for Chapter 8 (see pp. 282–3).

#### INSCRIPTIONS

Byzantine coin inscriptions developed out of those of late Roman times, but they changed profoundly during the long course of Byzantine history. They started in Latin, both in

language and in lettering; they ended in Greek, equally in both. They began with the inscription following the circumference of the coin, the letters small and neatly formed and the space occupied by the type being very large in relation to that of the inscription. Later the letters are often very large, so that an inscription in four or five lines will cover the entire surface of the coin. Frequently, where a type is retained, the inscriptions are broken up and dispersed vertically in the field wherever space can be found for them. On very late coins deliberately imitated from the West they acquire the characteristic aspect of Latin medieval coins, where an inscription in large letters between two circles of beading makes a border to the coin.

In the sixth century the language of the inscriptions is purely Latin, though from some of the mistakes that occur it is clear that the die-sinkers did not always comprehend their meaning. Monograms, however, which belong to a different tradition, are already in Greek. In 641 the first Greek inscription occurs, ΕΝ ΤΩ ΝΙΚΑ on folles of Constans II [367 ff.], though since it was a well-known tag its use would not in itself prove very much. Justinian II's ΙΗΣ ΧΡΙΣΤΟΣ ΡΕΞ ΡΕΓΝΑΝΤΙΩΝ [298] mixes Greek and Latin elements; Leo III's ΙΗΣ ΧΡΙΣΤΟΣ ΝΙΚΑ, on his miliaria [659], is Greek in content but partly Latin in spelling. The first extensive Greek inscriptions are those on solidi of Leo IV describing his relationship to his father and grandfather, who are called πατήρ and πάππος respectively (see p. 158), and Greek titles (*basileus*, *despotes*) become usual from the later eighth century onwards. The multilinear inscriptions on the miliaria and on the folles of the eighth and ninth centuries are almost entirely in Greek, though in 865 the suggestion – from Rome – that the Byzantines were ignorant of Latin was enough to provoke a return to Latin almost startling in its clarity – *Michael imperat(or)*, *Basilius rex*. Anything recognizably Latin disappeared about the middle of the eleventh century.

Inscriptions are in the main either identificatory, giving the name of a sovereign or religious personage, or pious. Anastasius I and his successors inherited a formula beginning DN (for *Dominus Noster*) and ending PPAVG (i.e. *Perpetuus Augustus*), the emperor's name coming in between, and as Latin was displaced by Greek the DN and PPAVG were dropped and replaced by such titles as ΒΑΣΙΛΕΥΣ (or ΒΑΣΙΛΕΥΣ ΡΩΜΑΙΩΝ), ΔΕΣΠΟΤΗΣ, ΑΥΤΟΚΡΑΤΩΡ. Religious inscriptions like ΙΗΣ ΧΡΙΣΤΟΣ ΡΕΞ ΡΕΓΝΑΝΤΙΩΝ, ΜΑΡΙΑ, Α ΘΕΟΔΩΡΟΣ, are similar in character. Sometimes the notion of acclamation is introduced, with phrases borrowed from the coronation *laudes*: e.g. DN IVSTINO ET SOFIE AG, with VITA in the exergue, on Carthaginian folles and half folles of Justin II [183] and the ΜΥΛΤΟΣ ΑΝ (*nos*) on solidi of Philippicus and his successors of the early eighth century. Pious inscriptions start in the sixth century fairly simply with such phrases on coins of Carthage as *Salus Mundi* and *Amenitas Dei*, but take on greater depth in the seventh century with *Deus adiuta Romanis* on the hexagram [330] and *En touto nika* on the follis [367], and in the eighth century, with *Iesus Christus Nica* on the miliaria [659]. The precatory element appears in innumerable formulae beginning ΚΕ ΒΟ, i.e. Κύριε βοήθει ('O Lord, help ...'), first used under Romanus I.

Greek letter-forms began already to appear on coins of the fifth century – b for B and 4 for

V on those of the usurper Basiliscus – but the sixth century is practically free from them apart from their presence in monograms and mint names (ΦK for Focas, ANTIX, AΛEZ, exceptionally KΩN) and in the ligature δ for OV. In the seventh century we sometimes find Λ, Π, Ρ (as *rho*), and Η (as *eta*), and in later centuries these multiply, though their spread cannot always be clearly traced – too many letters are common to both alphabets – and sometimes we have to do with Latin letters written in a Greek form. By the late eleventh century Latin letters used as such have disappeared. Since C had ceased by that time to represent K and stood exclusively for Σ, it has been convincingly shown that the first letter in the formula C R P Δ on coins of Romanus IV must be Στωρρὲ and not Κόρτε, as it was traditionally rendered (see p. 209 and accompanying note).

Dots had occasionally been used as punctuation marks in the fifth century, but Byzantine inscriptions as a whole follow the Latin tradition of making no separation between words. They never developed the elaborate system of punctuation marks which became one of the most frequently used methods of distinguishing between issues in western medieval coinage. Words are shortened either by simple omission or by the use of abbreviation marks or ligatured letters. The normal abbreviation mark at the end of a word is a tick or a superscript S (e.g. ThCYP, SCL<sup>S</sup>); suspension – i.e. the omission of letters – is sometimes marked by a superscript stroke or dot (MP Θ̄Y for Μητερ Θεοῦ, EN X̄Ω for ἐν Χριστῷ). Examples of ligatures are δ for OV, J for Tϕ, J in ΓE J ΓIOS, and MH in KOMNHNOC. Standard abbreviations are C for καὶ (i.e. S, which came from a tachygraphical form 4) and © for (A), i.e. ὁ ἅγιος before the name of a saint.

Numerals are practically limited to coins struck between late Roman times and the early ninth century, serving mainly as marks of value on the copper (from 498) but also for officinae and dates on coins of both copper and gold. Officina letters and marks of value are normally Greek, while date numerals are predominantly Latin. Those found on Byzantine coins are as follows:

Latin			Greek			
1 I	5 V or ʏ		1 Α	6 S or Ϛ	11 1Α	50 N
2 II	10 X		2 Β	7 Ζ	12 1Β	100 Ρ
3 III	50 L		3 Γ	8 Η	20 Κ	200 C
4 IV	100 C		4 Δ	9 Θ	30 Λ	
			5 Ε	10 Ι	40 Μ	

The Greek numeral for 6 appears out of place, for *sigma* is 200, but it in fact represents ST (for στίγμα) – the upper part ought to be, but usually is not, prolonged to the right – and takes the place of F (*vau*, known from its form as *digamma*), which existed when the numerical system was devised but had disappeared from classical Greek. Greek numerals are additive, not positional, so that although the larger figure usually comes first (1Ε for 15, 1Γ for 33) the order can be reversed; 23-carat coins of Constans II have a ligatured ΓΚ. Latin

numerals when used in Greek mints are also treated as additive, so that IV is 6, not 4, and IX is 11, not 9. The usual form for 5 is  $\Psi$ , not V, which is characteristically western, and  $\Psi$  (5) and  $\Sigma$  (6) are often difficult to distinguish from one another. The  $\Sigma$  is commonly treated as a Latin numeral, with  $\Sigma$  as 6,  $\Sigma$ 1 as 7, X $\Sigma$ 1 as 16, and so on.

#### ACCESSORY LETTERS AND SYMBOLS

What may be called accessory symbols, subordinate to the main type and inscription and comprising officina letters, date marks and the like, were mainly intended to serve a useful purpose. Others that at first sight seem to be purely decorative may have served to identify particular issues, as seems to have been the case with the permutations of stars, crosses and crescents that occur on sixth-century folles. Other marks which fulfil functions without explaining them are the Christogram instead of the customary cross above the M on folles struck at Constantinople under Justin II, which indicate a slightly heavier series, and the omission of a cross from the globus held by the Victory on the reverses of light-weight solidi.

In any discussion of accessory symbols we must always be prepared to make allowance for the great independence allowed to the mints and for the ingenuity displayed by some die-sinkers. It may be assumed that Alexandria, in using a different system of units for its copper coinage in the sixth and early seventh centuries from that employed elsewhere, had some official authorization to do so. It is less clear that Antioch was necessarily authorized to strike its folles, in the second half of the sixth century, to a different weight pattern from that of Constantinople, and it is quite unlikely that the moneyers of Thessalonica, in striking single-bust half folles of Justin II down to Year 5 and two-figure types throughout the reign of Tiberius II, were consulting anybody's taste but their own. One must also attribute to local ingenuity the use of a single symbol as a mark both of mint and value (e.g. K on half folles of Constantinople and Carthage), or as mark of value and ruler's initial (I between VS||TI||NI on decanummia of Justin II at Carthage [177]), or the incorporation of a mark of value in an imperial monogram, as on some half folles and pentanummia of the same ruler and mint. It must have been decided locally which denominations should be dated and which undated, perhaps even which to strike and which not to strike. The nature of most of our written sources inevitably creates the impression of a high degree of centralization in Byzantine government, of everything being directed from the capital. The evidence of the coins suggests that this must not be interpreted too rigidly, and that far more was left to local initiative than we are apt to suppose.

#### TECHNIQUE AND WORKMANSHIP

The standard of workmanship in the mints was very variable. That of the solidus, down to the introduction of the concave fabric, was as a rule very good, but semisses and tremisses were often struck on rather irregularly shaped flans, and the difficulty of adjusting the curved

surfaces of the dies for concave coins so that they met exactly resulted in very imperfect impressions of inscriptions and types. The cumbersome use of two half-dies instead of a single upper die occasionally seems to have been resorted to in an effort to solve the problem. The flans of the silver hexagrams of the seventh century are nearly always irregular in shape and the same is true of much of the copper, especially in periods of inflation when freshly prepared blanks were replaced by old coins reduced in weight by the simple expedient of cutting pieces from their edges. The practice of overstriking was at some periods universal on the copper, and even occurs sporadically for the gold. When uniformity in obverse types made it possible, the mints were tempted to use the same dies for several denominations, so that we find half folles and tremisses on which the imperial effigy is much too large and the inscription mainly off-flan, since the coins had been struck with the obverse dies for folles and semisses respectively. Careless adjustment of the faces of the coins is normal: it is usually somewhat out of the true,  $\nearrow$  or  $\swarrow$  instead of the precise  $\uparrow$  or  $\downarrow$  – or  $\rightarrow$  at Carthage – which it was evidently intended to be.

Die-sinkers' errors are of frequent occurrence, and always repay study. They range from the slight misspelling of inscriptions, which the engravers may well not have understood, to the complete blundering of imperial names and titles, as on the Antiochene copper coinage of the second half of the sixth century. Occasionally die-sinkers would forget what they were doing, and insert the wrong emperor's name. A half follis of Justin II and Sophia is known which bears the name of Justinian, and there are Carthaginian coins of Phocas which still have the effigy of Maurice. On a coin of Isaac II in the British Museum (W. 589/3) the emperor is shown with the forked beard of his predecessor Andronicus I. A die-sinker might copy the desired design directly on to the die instead of its mirror image, with the result that on the coin the inscription and type are reversed from left to right. Muling between issues, and even between reigns, is not uncommon; a die might even be brought back into use some years or even decades after it had become obsolete, either by accident or because a die of the proper type was not available. One has always to be aware of such possibilities of error, and not seek to draw far-reaching numismatic or historical conclusions from what may be no more than the mistakes of some humble workman at the mint.



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# THE SIXTH CENTURY,

## 491–610

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### General features

The coinage of Byzantium in the sixth century presents fewer problems than that of most other periods. The number of rulers was small and the date and place of minting are indicated on a high proportion of the coins. These naturally varied in design from ruler to ruler, but apart from two major innovations, the introduction of the follis by Anastasius in 498 and the modification in its external appearance effected by Justinian in 539, the denominations and the sizes of the coins changed on the whole very little. The most characteristic feature of sixth-century coinage is its copper. The gold coinage of the century was essentially similar to that which went before and that which came after, but the copper coinage, with its heavy pieces and extensive range of denominations, differs almost as much from the slovenly restruct folles of the mid-seventh century as it does from the miserable coinage of nummi which had preceded it in the fifth. Though the heaviest folles of Justinian had only a short life, we know from the evidence of hoards that those of Anastasius were still in circulation a hundred years after they were issued.

Seven emperors reigned during the period 491–610:

Anastasius I	491–518	Tiberius II	578–82
Justin I	518–27	Maurice	582–602
Justinian I	527–65	Phocas	602–10
Justin II	565–78		

Only the second, third and fourth of these were related to each other, Justinian I being a nephew of Justin I and Justin II one of Justinian. Of the others, Tiberius II was the adopted son and designated successor of Justin II and Maurice of Tiberius II, whose name he added

to his own, so that on his coins he is initially designated *Tiberius Mauricius* and subsequently *Mauricius Tiberius*. Tiberius II took the name *Constantinus* and the double form is common, though not invariable. Occasionally he is *Constantinus* only, which has led to confusion between his coins and those of Constans II. Succession problems arose only in 518, 602 and 610. Anastasius I, who died in 518, had made no provision for the future, but the accession of Justin I, an illiterate palace guard, was arranged within the palace and aroused only minor opposition. Maurice was overthrown in 602 by a military revolt, and murdered, in company with his sons, by the brutal usurper Phocas. Eight years later Phocas was in turn overthrown by Heraclius, son of the exarch of Africa, after a revolt which during two years (608–10) temporarily severed North Africa and Egypt from the jurisdiction of Constantinople.

For each of the emperors an abundant coinage exists. There are also some joint coinages, for there were four periods of associated Augusti:

Justin I and Justinian I	1 April – 1 August 527
Justin II and Tiberius II	26 September – 5 October 578
Tiberius II and Maurice	5 – 13 August 582
Maurice and his son Theodosius	26 March 590 – 23 November 602

Coins were struck during the first two of these joint reigns, gold and copper during that of Justin I and Justinian, gold only – no more than three solidi are known – during that of Justin II and Tiberius. The latter period, indeed, was so short that it is surprising that any have survived at all. No coins have been convincingly ascribed to the week's joint reign of Tiberius II and Maurice, and none were struck in the joint names of Maurice and Theodosius. Theodosius' name was also excluded from the formal dating of documents, and it is clear that Maurice, while – he hoped – providing for the future by associating his son with him on the throne, aimed at keeping him out of the public eye as much as possible. The so-called 'family coinage' of Cherson, in which Maurice is shown with his wife and son, and the silver coinage struck in the name of Theodosius at Carthage fall into a different category and will be discussed below. The office of Caesar did not include the right to a place on the coinage. No coins of Tiberius II were struck before his association as Augustus by Justin II on 26 September 578, though he had become effective ruler of the Empire on being nominated Caesar in December 574, since Justin II was insane. When his coinage did begin in 578, however, it is dated, in defiance of protocol, from his 'accession' in 574, so that he has no coins of Years 1–3 and those of Year 4, struck between September and December 578, are very rare.

Coins bearing the effigies of empresses present some peculiarities, for the dignity of Augusta did not necessarily carry with it the right to figure on the coinage. The old tradition had been that coins might only be struck in the name of an empress after she had provided an heir to the throne. This had been followed during the fourth and fifth centuries with the notable exception of the family of Theodosius II, and it remained the rule in the first half of the sixth century. There are consequently no coins of Ariadne as wife of Anastasius – her

rare coins belong to the period of her first marriage to the emperor Zeno – or of Euphemia the wife of Justin I, or even of the great Theodora, for all were childless. Justin II had a son, who died young, and Sophia, his strong-minded wife, the niece of Theodora, was consequently entitled to an honour to which her all-powerful aunt had never attained. The old practice was revived for Sophia, however, in a new form, since instead of the issue of separate series of coins bearing the name and bust of the empress she was associated on some of the silver and the bulk of the copper with her husband. She never appeared on the gold.

During the next three reigns the imperial chancery, or whatever body it was that decided such matters, seems to have tried to put a stop to the practice of association altogether. There was no difficulty over Tiberius II, for he had no son, and the empress Anastasia had therefore no right to appear at all. It is true that she does so on the half folles of Thessalonica, but this was an aberration of a provincial mint which continued a type used for Justin II and Sophia; she never figures on coins struck at Constantinople, where constitutional proprieties would naturally be more faithfully observed. Nor does Constantina, the wife of Maurice, appear on coins of the principal mints, despite the fact that she was the mother of five sons and three daughters. Her presence on a half follis of Year 1 of Thessalonica resulted simply from the desire to perpetuate a type made familiar during the two previous reigns, and before the year ended the type had been altered to conform to that of Constantinople and show Maurice only. The ‘family coins’ of Cherson are not a regular imperial issue. The presence of the empress Leontia on coins of Phocas, though justifiable in theory, since she had at least one daughter, seems to have been due to the accident that the first coins of the usurper were copied from those of Cherson with Maurice and Constantina and so showed two figures. She was dismissed from the coinage of Constantinople in the second year of the reign, though other mints, which had followed the cue of the capital in placing her effigy on the coins, retained it longer, in the case of Antioch almost to the end of the reign. But the representation of several figures was evidently popular, and in the seventh century it was to become a normal feature of Byzantine coinage.

Three groups of what one can conveniently term insurrectionary coins, an extremely rare phenomenon in Byzantine history, seem to have occurred towards the end of the period, though the ‘insurrectionary’ nature of two of them has been questioned. One is the so-called ‘family coinage’ of Maurice, Constantina and Theodosius struck at Cherson [161–3]. The traditional opinion is that it dates from 602, and testifies to the willingness of at least one section of the army to accept the succession of Theodosius. The coins may, however, be earlier in date (see p. 73). The second group consists of the silver coins struck at Carthage in the name of Maurice’s son Theodosius [53] giving him the full imperial title (DN TEODOSIVS PPA). The boy was reputed to have escaped the massacre of his family at the hands of Phocas, and their most likely explanation is that a garbled story of what had happened reached the West, so that he was believed in Africa to be still alive. An alternative view, however, is that the coins date from the later years of Maurice’s reign, after the association of Theodosius as co-emperor in 590.

The remaining series, whose 'insurrectionary' character is beyond question, consists of the coins struck at Carthage, Alexandria, Cyprus and Alexandretta during the revolt of Heraclius against Phocas in 608–10. The difficulties of protocol inherent in such a coinage were avoided by striking it in the name of the elder Heraclius, exarch of Africa and father of the future emperor, and giving him the title of consul. He is shown on the coins either alone [184] or in company with his son [36, 47], but in the latter case the son, as potential emperor, is given the place of honour on the left, while the older bearded face of the father takes the junior place on the right. The strange idea that the consular office could justify the issue of coins received a certain degree of support from the fact that since the accession of Tiberius II consular types had been common. The coins were formerly attributed to various periods in the reign of Heraclius according to the real or supposed consulships of the emperor or his son Heraclius Constantine, but the date numerals on the solidi of Carthage show that they were all struck during 608–10. Similar coins were struck in eastern mints [164–7] as the revolt developed, but these are all much rarer than those from Carthage. An anomalous situation was created by the fact that when the revolt spread eastwards, into areas which were accustomed to dated folles, the coins struck in Cyprus and Alexandretta took over the indictional dating used on the solidi of Carthage but accompanied the date with the customary *Anno* and not with the more correct *Ind(ictione)*. It is mainly this feature that has led to such confusion over their dating.

Sixth-century coinage was predominantly one of gold and copper. In Italy and North Africa, under the Ostrogoths and Vandals, silver coins had played a fairly important role, and similar coinages were continued after their reconquest, more especially in Italy. In the East, on the other hand, silver was only used for ceremonial coins which served no commercial function. The three denominations of gold coins were known as the solidus (νόμισμα in Greek), semissis and tremissis, and the major denominations of copper were the follis, half follis, decanummium, pentanummium and nummus. Numismatists are not agreed on the nomenclature of the silver coins. The two chief 'ceremonial' denominations struck in the East are customarily termed a siliqua (c. 2.5 g) and a double siliqua (c. 5 g), but it is more likely that the smaller one was the miliaresion of our written sources. One of the Italian silver coins, that marked CN (= 250, i.e. 250 nummi), had presumably the value of a siliqua, and the coin marked PKE (= 125) that of a half siliqua, but the values and still more the names of most of the others are uncertain. The details of the monetary system are also little known. The simultaneous striking of silver coins in Italy marked PK (120) and PKE implies a solidus which was there reckoned at 6000 nummi, but Procopius refers to Justinian's calling down the value of the solidus from 210 to 180 folles, i.e. from 8400 to 7200 nummi, which it had been at a century before. The date of this is uncertain: Procopius seems to imply that it occurred during Peter Barsymas' second term of office as Count of the Sacred Largesses and during the lifetime of Theodora, which would fix it at 548, but on general grounds it is more likely to have been done on the occasion of his introduction of the heaviest system of folles in 539. Even though the copper was of a token character it is inconceivable

that Anastasius' small folles can have had the same value in relation to the solidus as his large ones, though both are marked as worth 40 nummi, and it seems likely that at the beginning of the sixth century the solidus may have been rated at about 14,000 nummi, twice the traditional figure. If the weight of the follis is any guide it may have been back at this figure by the end of the century. Price levels were apparently much lower in Italy and Africa than they were in the East, for in both provinces the coin in most general use was the half follis, not the follis, and both lagged behind in the abandonment of the lower denominations, which virtually disappeared in the East as the result of inflation by the middle of the seventh century.

The number of mints rose from three under Anastasius to a total of ten or more under Justinian, whose western conquests transferred the traditional mints of Carthage, Rome and Ravenna from Germanic to imperial control. The main eastern mints were Constantinople, Nicomedia, Cyzicus, Thessalonica, Antioch and Alexandria, respectively in the dioceses of Thrace, Pontus, Asia, Illyricum, Oriens and Egypt, and were presumably charged with supplying each of these with the coinage it needed. In fact the copper coin was current generally throughout the Empire, and the Code of Justinian omitted a constitution of Constantius II prohibiting merchants from carrying it from place to place, presumably for purposes of speculation. Even the coinage of Alexandria is occasionally found outside Egypt itself, despite its abnormal pattern of denominations, and the fact that the coins of other mints varied somewhat in weight does not seem to have stood in the way of their general acceptance. It is at first sight perplexing to find three mints, Constantinople, Nicomedia and Cyzicus, grouped together closely round the Sea of Marmora, since one would expect that Pontus and Asia would have been supplied more conveniently from mints centrally placed in these dioceses, but tradition, coupled with the fact that as ports they conveniently lent themselves to the transport of the tons of copper required for coinage, presumably explains their choice. From the reign of Justin I onwards coins were sometimes struck at Cherson, the Byzantine outpost on the north coast of the Black Sea.

The obverses of sixth-century coins normally showed the bust, name and title of the reigning emperor. There was a marked extension of the eastern preference for a facing bust over the western tradition of a profile one: after Justinian's reform the latter was virtually relegated to the minor denominations of copper, as it was to the minor denominations of gold. The facing bust started as strongly military in character, the emperor being shown wearing cuirass and helmet, and holding a shield in his left hand, a shouldered spear in his right. Under Justinian the spear was replaced by a globus cruciger, which henceforward became a regular adjunct of the imperial bust, only Justin II preferring an orb surmounted by a Victory instead of by a cross. Tiberius II and Phocas are shown with a crown instead of a helmet, and Maurice and Phocas on most of their coinage dispensed with a shield, their armour being covered by a paludamentum fastened by a fibula with three pendants at the right shoulder. A paludamentum is also a regular feature of the profile busts; it is worn over a cuirass, but little of the latter is normally visible. Profile busts are generally diademed; only

on the silver are they sometimes helmeted. An element of portraiture was introduced under Phocas, whose pointed beard and shaggy sidelocks make his effigy one of the most immediately recognizable in the Byzantine series. Consular costume and insignia – the eagle-headed scipio and the mappa which was thrown into the circus to start the games – are rare on the gold but become common on the copper from Tiberius II onwards. The bust is occasionally replaced by a seated figure [5] or figures (e.g. Justin I and Justinian, Justin II and Sophia), more rarely by two standing ones (e.g. Phocas and Leontia).

The reverse types of the gold are partly pagan, partly Christian, but the replacement of the Victory on the solidus by an angel (under Justin I) and subsequently by a cross (under Tiberius II) shows the gradual abandonment of ancient traditions. The silver shows a similar transition, though here the 'cross' types replace the standing figure of an emperor or a *Vota* inscription. The major innovation on the copper is the use of a mark of value as the type itself, thus relieving the mint authority of any difficulties over declaring its religious affiliations. Marks of value were occasionally allowed to spread from the copper to the silver, as in Italy under Justinian (CN, PKC, PK). Variations between the products of different mints are sufficient proof that only the general pattern of the coinage was laid down, not the details, though provincial mints naturally tended to take their cue from Constantinople.

The obverse inscription normally consisted of the emperor's name in the nominative preceded by DN or VM (i.e. *Dominus Noster*) and followed by PPAVC (*Perpetuus Augustus*), though the earlier PFAVC (*Pius Felix Augustus*) was still used on the coinage of Italy down to the end of the Ostrogothic kingdom and was common on the many pseudo-imperial imitations of the West. Under Phocas, who like Leo and Zeno a century and a half earlier had a short name, the PP was extended to PCRP or PCR in order to fill out the inscription. This also occurs on the earliest gold coins of Anastasius [28], having been carried over from the reign of Zeno. Sometimes, particularly in Italy under Justinian, who had an inconveniently long name, the DN or the PPAVC were omitted. If the length of an emperor's name was so long that it could not be given in full, as in the cases of Tiberius II (*Tiberius Constantinus*) and Maurice (*Mauricius Tiberius*), or where two emperors were involved (*Iustinus et Iustinianus*), the names could be abbreviated (MAVR Tib) or even divided, one part being placed on the obverse and the other on the reverse. On coins of Maurice the order of the component parts is of some significance, the earliest issues of the reign having some variant of TibCR(ius) MAVR(icius) and the later ones MAVRIC(ius) TIBER(ius). The emperor's own name was Maurice, but Tiberius had been added by his predecessor when associating him on the throne, and Maurice at first allowed this added element to take precedence over his own. When an empress was associated with her husband, her name does not normally appear even when her effigy is represented. The only exceptions to this are the copper coinage of Justin II and Sophia of the mint of Carthage, where the inscriptions are DN IVSTINO ET SOFIE AVC in the dative, these being understood in association with the VITA (i.e. 'Long life to ...') in the exergue of the follis and half follis [183] as a form of

acclamation, and the eastern pentanummia of the same imperial pair, where Sophia's name is incorporated in the monogram that forms the obverse type [102, 117, 128: it stands for IOVCTINOV KAI COΦIAE].

The inscription is normally broken (e.g. DNIVST INVSPPAVC), the rare examples of unbroken inscriptions being attributable to the vagaries of individual die-sinkers and not to policy. The convention of the late fourth century, by which an unbroken inscription implied that the name was that of a junior colleague, had completely disappeared. The title of *consul* appears only on the Heraclian coinage of the revolt of 608–10. On other consular coins [e.g. 5, 6] the imperial title is used, though the regular formula is changed on the consular solidi of Tiberius II [4] into CONSTANT AVG ΚΙΥ FELIX, i.e. *Constantinus Augustus Vivat Felix*, one of the acclamations with which the emperor would be greeted on his assumption of the consulship. On solidi of Carthage struck in the last year of Tiberius II and on those of Maurice, Phocas, and the Interregnum of 608–10, the obverse inscriptions end AVNA, ANB, etc., instead of AVC, since they incorporate a date, the terminal letter or letters giving the number of the indiction (see pp. 54, 70).

The regular reverse inscription on the gold, up to the death of Justin II, was the traditional VICTORIA AVGVSTORVM, in full on the tremisses but abbreviated to VICTORIA AVCCC – the letter G has at this period the form C – on the solidi and semisses. It referred originally to the Victory that formed the type but had become completely immobilized, surviving the replacement of the Victory by an angel under Justin I and the later substitution of some form of cross for the Victory types altogether. The plural *Augustorum* continued in use despite the fact that there was now as a rule only a single emperor, and the convention of the late fourth and early fifth century by which the number of terminal Cs corresponded to that of associated rulers had been completely forgotten. On the solidi the inscription is normally followed by a letter indicating the officina responsible for the coin, but there are a few exceptions. ΘS, T, or S is used between the reign of Justinian and that of Maurice to identify the mint of Thessalonica, and the letters on the solidi of Carthage from 582 onwards repeat the date given by the obverse inscription.

On the consular solidi of Tiberius II and on all his semisses and tremisses the obverse inscription included only the *Constantinus* element in his name, so the reverse inscription was modified to read VICTOR(ia) TIBERI(i) AVG(usti). The main series of solidi continued the traditional inscription, but with CC, a more rational plural form, instead of CCC. Maurice used VICTORIA AVCC on all denominations of gold, save in one mint where the practice of Tiberius II was followed on the tremisses, so that the obverse reads ὩΝ ΤΙΒΕΡΙ ΠΡ AVG and the reverse VICTORI(a) MAVRI(cii) AVG(usti), and at Ravenna, where the full VICTORIA AVGVSTORVN [sic] (the final RVN standing for Ravenna) was used on the tremissis. For Phocas there are two series of solidi, one with the customary AVCC and the other [35] with AVGΥ (i.e. *Augusti*), the latter implying clearly that only one emperor was involved. This inscription passed into regular use in the future, but the irregular solidi struck

at Carthage and Alexandria during the revolt of 608–10 have VICTORIA CONSVAI [47] or – at Alexandria only – VICTORIA AVCC [36], the former being a reflection of the consular inscription on the obverse and the latter being due to the use of an old die of Tiberius II.

The inscriptions on the silver coins are of little interest apart from those of Carthage, which are discussed on p. 58. Eastern issues with the standing figure of the emperor have the traditional GLORIA ROMANORVM [7, 9–11], often somewhat blundered, while those with an inscription in a wreath have some blundered form of *Votis Multis* [8]. Italian silver coins are without inscription on the reverse. Copper coins have normally no reverse inscription, though CONCORDI(a) occurs on decanummia of Anastasius [67, 68, 76] and Justin I, and *Victoria* or *Victoria A(u)g* on some decanummia and pentanummia of Carthage [173, 174].

The language of the inscriptions is Latin throughout, though in some contexts Greek and Latin letter-forms are used indifferently and eastern place-names are sometimes wholly in Greek (ΘῶΠΙΟ for Θεούπολις, ΧΕΡCΩNOC). The use of Latin for inscriptions in areas where Greek was the language of everyday life contributed to their frequent blundering, which reached its climax in the copper coinage of Antioch from 561 onwards. Monograms tended to be Greek rather than Latin, with genitive endings in -ov (e.g. ANACTACIOV) and with K (for καὶ, instead of *et*) in the monogram of Justin II and Sophia. Greek numerals are invariably used for officina marks and usually for marks of value, even in the West, but dates, under the influence of the accompanying ANNO, are normally in Latin.

## Gold coinage (Pls 1–3)

The gold coinage in regular use consisted of three denominations, the solidus, semissis and tremissis, of which the solidus was most important. A half tremissis was very occasionally struck. Of higher value than the solidus, but not in everyday circulation, were the magnificent gold medallions intended for ceremonial purposes that for the most part cannot be precisely identified. The few that survive are almost without exception unique, so no doubt others were struck of which we have no knowledge.

### MEDALLIONS

The largest existing medallion is a 6-solidus piece [2] of Maurice, a twelfth of a pound in weight. Four specimens, from the same pair of dies, are mounted as part of the girdle that came from the Kyrenia treasure and is now in the Metropolitan Museum in New York. The obverse shows the crowned bust of the emperor, wearing the consular loros and holding a mappa and an eagle-topped sceptre; the reverse shows the same emperor in a quadriga. It is not known whether it dates from Maurice's first consulship in 583 or his second one in 602. One larger multiple survived into modern times, a 36-solidus or half-pound Victory medal-



lion of Justinian which was once in the Bibliothèque Nationale until it was stolen in 1831 and melted down; it is illustrated by Wroth as the frontispiece to his catalogue (also *BNC* Pl. VIII). Still larger medallions are known to have existed. The sixth-century historian Gregory of Tours describes how he saw several one-pound medallions – their reverse type was the same as that of the 6-solidus medallions of Maurice – which were sent as gifts by Tiberius II to the Frankish king Chilperic I. Smaller multiples that survive are a mounted  $4\frac{1}{2}$ -solidus medallion of Justinian in the Louvre (*MIB* I, Pl. 1.2), a 3-solidus medallion of Theoderic the Ostrogoth at Rome which is reproduced as the frontispiece to the British Museum catalogue of Vandal and Ostrogothic coins (also *MIB* I, Pl. 36.1), a  $1\frac{1}{2}$ -solidus medallion of Justin I at Paris showing the emperor on horseback (*MIB* I, Pl. 5.1) and aurei of Anastasius I [1; var. *MIB* I, Pl. 1.1a] and Justinian (*MIB* I, Pl. 1.3) struck to the old Diocletianic figure of 1/60th of the pound. These medallions are in general of traditional types but are often, particularly in the treatment of facing imperial busts, original in their details; they prove that the Byzantine mint was capable on occasion of attaining a much higher artistic level than it usually did on its coins. The medallions of Maurice, however, mark the end of a great tradition; if any later ones were struck, no specimens have come down to us.

#### SOLIDI

There are three classes of solidi. The most important from the economic point of view were those of normal weight, issued in great quantities for regular circulation. There were in addition ceremonial solidi, struck in small numbers for special occasions; they served the same purpose as medallions but are the same weight as normal solidi. Finally, there were light-weight solidi differing only slightly from the regular issues and struck in relatively small numbers for purposes that are still unknown.

The main types of regular solidus struck between 491 and 610 are shown on Plate 2. The changes in the obverse types require little comment. The normal type is a facing bust of the emperor, though the brief joint reigns of Justin I and Justinian (527) and Justin II and Tiberius II (578) saw the issue of rare solidi having two seated figures [19] or two busts. The only coins with any pretence to portraiture are those of Phocas [25, 26, 35]; the others, whether the bust is three-quarter or fully facing, are purely conventional, one emperor differing from another only in his costume and insignia. The general tendency was to move away from purely military types, the spear being eliminated, the shield replaced by a military cloak, a crown substituted for a helmet. The evolution was not a continuous one, for each of the later emperors preferred to vary his predecessor's type, so that while Tiberius [23] and Phocas [25, 26] might be shown with a crown, Maurice [24] reverted to the helmet of Justinian's coins. The most striking and the most permanent change in design is Justinian's substitution of the globus cruciger for the traditional spear [20, 21]. Procopius, in describing the great equestrian statue of the emperor in the Augusteum, called attention to the

significance of the emblem. 'In his left hand' (on the coins, in his right hand) 'he holds a globe, by which the sculptor signifies that the whole world and sea are subject to him, yet he has neither sword nor spear nor any other weapon, but a cross stands upon the globe which he carries, the emblem by which he had obtained both his empire and victory in war.' Justin II, who seems to have had a weakness for pagan types, replaced the cross on the globus by a small Victory crowning him with a wreath [22]. It was perhaps this design that gave rise to the story of how, on the occasion of transferring power to the Caesar Tiberius, he was prompted by an angel whispering in his ear.

The evolution of the reverse type is more interesting. Anastasius started with a Victory holding a long jewelled cross [15], a type which had been introduced in 420 and had dominated the solidus of the later fifth century. Subsequently he replaced this by a long staff surmounted by a progressively simplified form of the Chi-Rho monogram of Christ [16]. Justin I at first continued this type [17], but later substituted for it a facing angel holding a long cross [18], the change of sex from the Victory (female) to the angel (male) being shown by the disappearance of the high girdle below the breasts. Justinian continued the same type [20], subsequently modifying the long cross held by the angel into a staff surmounted by the simplified Christogram [21]. Justin II's reign saw a reversion to a pagan type, the seated figure of Constantinopolis [22], but the decline in ancient traditions had gone so far that in the provinces people were not sure of its identity and compared it with an image of Venus. Tiberius II, allegedly prompted by a dream, substituted for this a cross on steps [23], representing the great golden cross which had been erected on Mount Calvary during the reign of Theodosius II. Maurice and Phocas reverted to the facing angel of Justinian's coins [24-6].

These types characterize the normal issues of solidi. Ceremonial solidi are more elaborate in their designs. Anastasius I celebrated his marriage with the empress Ariadne, to whom he owed the throne, with a coin having as reverse type the standing figure of Christ, blessing the union between Ariadne and himself [3]. Justinian issued a consular solidus having on the obverse his seated figure wearing consular robes and on the reverse two Victories supporting a cross [*MIB I*, Pl. 14.4). Only a single specimen is known of each of these coins. At the end of the century consular solidi became slightly commoner, those of Tiberius II, Maurice and Phocas having the bust of the emperor or his seated figure in consular robes as their obverse types [4, 5, 6]. Rare solidi of Anastasius I and of Justin II show the emperor with a beard, though in the latter case it is no more than a slight stippling on the lower part of the face.

In addition to the full-weight solidi, two important series of light-weight ones were inaugurated by Justinian and continued, with additions or modifications, by his successors. They were distinguished from ordinary solidi by alterations in the formula CONOB and by a small change in the reverse type, the substitution of a plain globus for the globus cruciger held by the angel, or by the seated Constantinopolis on the solidi of Justin II. The commoner of the two main groups weighs 20 siliquae or carats, i.e. 3.78 g, the coins at first being marked

OB (or CO) followed by a cross and a star but later by XX [32, 35], so that OBXX could be read plainly as 20 carats. Side by side with these were solidi weighing *c.* 4.1 g, probably representing  $21\frac{1}{2}$  carats (i.e. 4.05 g), which were first marked OB\* + \* [33] but later, after the formula OBXX had become that regularly used for the 20-carat coins, OB + \* [34]. The chief mint seems to have been Constantinople for the 20-carat coins, Thessalonica for the  $21\frac{1}{2}$ -carat ones, these being marked with ΘS (initially Θ) at the end of the reverse inscriptions. A third series of light-weight solidi, one of 23 carats (4.35 g), was created under Maurice and continued under Phocas and in the early years of Heraclius. Here the CONOB was left unchanged, the abnormal character of the coins being indicated by a star in the obverse and reverse fields.

The purpose of these light-weight solidi has been much discussed. The only substantial hoard of 23-carat coins which has been recorded comes from Georgia, but many of the 20-carat series are known to have been found in Russia or central Europe, which has given rise to the view that they were struck for trade with the Germanic world. To this it can be objected that imperial legislation strictly forbade merchants to export coin. It is true, however, that 20-carat coins fitted better into the Germanic weight system, which was based on the barleycorn, than did those of 24 carats, for 20 carats was almost exactly the equivalent of 60 grains and thus 3 'shillings' of 20 grains each. It might therefore have been convenient for the government to manufacture such coins when tributes or other official payments to the Germans had to be made. This explanation, however, will not cover the coins of  $21\frac{1}{2}$  and 23 carats. Hahn has argued that they were introduced to facilitate calculations involving solidi and folles at the time of Justinian's revaluation of the solidus in 538/9, but their long continuance is against this hypothesis. Some local form of reckoning may be the explanation. There is not at present sufficient evidence to decide the matter.

The chief mint of the Empire for gold was Constantinople, but others existed also. A long series of rather rare solidi without officina letter, and initially with two stars instead of one in the field, can be attributed to Thessalonica; the earlier of them (Anastasius through Justinian) have simply the reverse inscription ending with CCC, but under later emperors there is a final S or T, the latter either roman or cursive in form. Some tremisses can be assigned to the same mint, mainly on grounds of style, and I would also attributed to Thessalonica the light-weight solidi with ΘS at the end of the reverse inscription [33, 34] even if the dies for these were actually made at Constantinople. Alexandria was also a mint, for there are rare solidi of Justin II with the mint-mark AA ZOB, and some coins with CONOB, which was by this time no more than a stereotyped formula, probably belong there too. Such solidi were certainly struck there in 608–10, after Nicetas had occupied the city on behalf of Heraclius. The earliest of the coins attributable to these years involved the use of obverse dies of extremely rough workmanship and reverse dies of good style with inappropriate inscriptions, which can only be old dies of Tiberius II brought back into use [36]. These were followed by coins having appropriate reverses of rough workmanship, until finally a

competent die-sinker was imported from Carthage and coins of good style began to be struck. They are of the normal module of eastern solidi, quite different from that of the solidi of Carthage, but they are purely Carthaginian in style and have some letter forms, notably a peculiar L which looks like a compromise between a Latin L and a Greek lambda, which are characteristic of Carthage in these years and in the early part of Heraclius' reign.

CONOB was likewise used at western mints, replacing the COMOB which had been customary during the fifth and the first half of the sixth century. Carthage struck gold in considerable quantities. One can attribute to it under Justinian a group of coins of crude workmanship [42] which are commonly found in North Africa; one specimen, indeed, has ΑΦΡ (= Ἀφρικὴ) instead of CONOB as mint-mark (*MIB* I, Pl. 16.26). Solidi of Justin II [43] and of Tiberius II with various peculiarities of style and design can also be plausibly attributed to Carthage, and from the last year of Tiberius II onwards the attribution becomes a certainty. Under Maurice the solidi of Carthage have at the ends of their inscriptions a Greek letter which is in fact a numeral representing on the obverse the regnal and on the reverse the indictional year, and there also exist coins of Tiberius exhibiting the same phenomenon, with ANH (= Year 8) on the obverse and ΙΕ (= Indiction 15) on the reverse, both corresponding to AD 581/2 (*MIB* II, Pl. 10.14).<sup>1</sup> The coins of the reigns of Maurice and Phocas, which are of very distinctive style and are found almost exclusively in North Africa, gradually declined in module [44–7], though not in weight, until they merged into the characteristic globular coins of Carthage of the seventh century [446 ff.]. In 608, with the outbreak of Heraclius' revolt, there began a three-year issue of solidi with the facing consular busts of the exarch Heraclius and his son, bareheaded and without imperial insignia, and the inscription DN ΕΡΑΚΛΙ CONΣΒΛΙ. They are dated to Indictions ΙΑ (607/8) [47], ΙΒ (608/9) and ΙΓ (609/10); probably ΙΔ will be found in due course.

Italian mints also existed, in succession to those of the Ostrogoths, their work being characterized by high relief and the presence of a high annular border. Under Justinian the separation between Constantinople and Italian mints is not easy; only under Justin II and Tiberius II do the styles become completely distinct from one another. The bulk of the coins are generally attributed to Ravenna [38–41], which was the seat of the imperial government and which we know from documentary evidence to have minted in gold, though a few are customarily given to Rome [37] and ROMOB occurs as a mint-mark on rare solidi and tremisses of Justinian. But the mint attributions of sixth-century Italian solidi and the interpretation of the letters that end their reverse inscriptions – those of Ravenna seem in the last decades of the century to be indictional dates – are still far from clear.

1 Under Maurice the indictional dates and the regnal years coincided for the first fifteen years of the reign. The meaning of the AN preceding the numeral on the obverse was overlooked in 597/8, when the indiction was changed to 1 but

the regnal year should have become 16. Both were changed to 1, and indictional dating on both sides was thenceforward characteristic of the solidi of Carthage.

## SEMISSSES AND TREMISSSES

The lower denominations of gold, being less important, were less prone to change than the solidus. The obverse types of both semissis and tremissis remained the same throughout the century, and the reverse types retained the pagan Victory long after this had been replaced by the Christian angel on the solidus.

The obverse type was invariably the profile bust of the emperor, wearing diadem and paludamentum, this being slung across the emperor's chest and then thrown over his left shoulder, so that one sometimes sees the trace of an epaulette on his left arm as well as on his right. The only attempt at likeness consists of one issue of Phocas from Ravenna – the tremissis only is known (*MIB* II, Pl. 30. 50, 51) – which shows the emperor with a beard; this also has a cross on the front of the diadem. Since the same obverse type was common to both semissis and tremissis, the tremisses were occasionally struck with semissis obverse dies, so that their inscriptions are partly off-flan. The inscription is normally that of the solidus.

Three reverse types were used on the semissis during the period: (1) a seated Victory inscribing XXXX on a shield, with ☩ or P to right (Anastasius – Justin II [27]), (2) a cross potent above a circle (Tiberius II, Maurice [29]), and (3) a Victory facing holding a wreath and globus cruciger (Maurice, Phocas). The first of these was traditional, having been that in normal use for the denomination throughout the fifth century. Originally the number of Xs had formed a real *Vota* numeral, with a succession V, X, XV, XX, etc., but the high figure XXXX reached under Theodosius II was immobilized and used by his successors, whatever the true length of their reigns. Under Justin I and in the early years of Justinian the numeral was still written legibly, but in Justinian's later issues it was reduced to a series of strokes or omitted entirely, and since this negligence continued under Justin II its form provides a simple means of distinguishing between the semisses of the two Justins. The inscription was *Victoria Auccc*, as on the solidus.

The second semissis type, with its use of the cross [29], was a pendant to Tiberius' introduction of the cross on steps on his solidus and was to provide the model for the semisses of the seventh and early eighth centuries. It involved a change in the traditional reverse inscription, which now became *Victor(ia) Tiberi Aug* instead of *Victoria Auccc*, the reason being that Tiberius' adopted name of Constantine appeared in full on the obverse and left no room for his original name of Tiberius. Under Maurice, who used the type only at the start of his reign, there is a parallel employment of *Tiberius* on the obverse and *Mauricius* on the reverse [29]. The third type is anomalous, for it represents a revival on the semissis of a type formerly proper to the tremissis. Its issue under Phocas represents the last use of the traditional Roman Victory as a main type on Byzantine coins in the eastern half of the Empire.

Only two tremissis reverse types were used during the century: (1) a Victory walking right and looking backwards, with a wreath and globus cruciger (Anastasius – Justin II [28, 31]) and (2) a cross potent (Tiberius II onwards [30]). The first of these was a continuation of one

which had been usual in the East in the fifth century. The inscription is always *Victoria Augustorum*. The issues of the two Justins are sometimes confused, since the type and inscriptions are the same for both, but they can be distinguished by the absence of a pellet on the fibula of those of Justin II as well as by the lower relief and more careless fabric of the later coins. The second type, introduced by Tiberius II, has the same reverse inscription as his semisses, *Victor. Tiberi. Aug.* The type and a suitably modified inscription were retained by his two successors.

Few semisses and tremisses can be identified with certainty as having been struck at eastern mints other than Constantinople, but a number of western issues are known. From Justinian's reconquest of Italy onwards there are semisses and tremisses – mainly the latter – of Ravenna, of the same types as those struck at Constantinople but distinguished from them by higher relief, the presence of a deep annular border, and growing formalization in the design of the emperor's cloak [41]. Under Maurice the tremissis type was again the traditional Victory instead of a cross potent. From Justinian I onwards, to the mid 620s, a series of tremisses of very distinctive style was struck in Spain, probably at Carthage; specimens of Phocas and Heraclius are illustrated [54, 55]. They are of poor metal, like the contemporary tremisses of the neighbouring Visigothic kingdom, which they also resemble in their thin, spread fabric. The few specimens whose provenance is known come either from Spanish hoards or from collections formed in Spain.

The half tremissis as a denomination is known in this period only for Justin II [31] and Phocas. The coins are struck with tremissis dies, but their very thin flans and low weights (c. 0.80 g) justify us in regarding them as specimens of a separate denomination, not as cut-down tremisses.

### Silver coinage (Pls 1, 3)

The position of silver in the hierarchy of metals struck during the sixth century was a curious one. In the East, the currency in ordinary circulation consisted entirely of gold and copper. Though a number of silver coins of different types and modules have survived, they have usually done so only in twos or threes; several, indeed, are known only from unique specimens. To this there is one exception, a fairly common silver coin [9] of c. 2.5 g usually attributed to Justin I but more probably of Justin II. Since all known specimens, however, are from a very limited number of dies – possibly from a single pair, though since the coins are very lightly struck it is difficult to be sure – the issue must in reality have been very small and the survival of so many specimens an accident, possibly the result of one or two dispersed hoards. These eastern coins can all be regarded as ceremonial issues intended for distribution on specific occasions, not for regular circulation, a fact which explains their irregularity in weight and perhaps, since some will have been prepared at short notice, their irregular fabric and the frequent blundering in their inscriptions. In the West, on the contrary, small silver

coins had formed a regular part of the circulating medium in both Vandal Africa and Ostrogothic Italy, and in both provinces this coinage was continued by Justinian's government after the reconquest. In the middle decades of the century silver was being struck in quantity, but by its end production had tailed off and issues were almost as rare as those in the East.

The eastern issues, up to and including the reign of Justin II, are of two main types, one having a 'standing figure' reverse and the other a *Vota* reverse. Both of these go back to common types of the preceding century. The standing figure, which represents the emperor, varies in his attributes: sometimes he raises his right hand and holds a globus in his left [11], sometimes he has a spear in one hand and a globus cruciger [9, 10] or shield [7] in the other. The coins are often medallic in character, having borders ornamented with large pellets or even an inscription, and the emperor's head is sometimes turned to the left [11], this probably implying that such coins were struck on the occasion of a consulship. There seem to have been mainly two denominations, one of *c.* 5 g and the other of *c.* 2.5 g, but since the coins had no commercial function the weights are very irregular and their relationship to the Roman pound is uncertain. It is not easy to distinguish between the coins of the two Justins, but those in high relief are best given to Justin I and those in low relief to Justin II.

Side by side with these issues are others with blundered *Vota* inscriptions [8]. The coins of Anastasius, Justin I and Justinian of this type are small and of extreme rarity. For Anastasius I and Justin I or Justin II there also exist large medallions of *c.* 12 g, very badly struck, the latter having the blundered inscription VOT|XXXX|MVST|XXXX, the badly formed L (in MVL T) of the Anastasius medallions having been misunderstood as an S. Such an inscription was meaningless in the context of either reign, which fell short of thirty-five years, but goes back, by way of a silver medallion of Leo I, to a lost prototype of the later years of the reign of Theodosius II.

With the reign of Tiberius II, a change in the pattern of the eastern ceremonial coins came about. Both *Vota* and 'standing figure' types, with their ancient pagan or military connections, were abandoned in favour of a large Christogram [12], two denominations with this new type being struck. Maurice first carried on the same type, but later substituted for it a cross potent, either in a wreath [13] or placed over a globe in a double circle of dots or between two palm branches [14]. Phocas and his successors throughout the seventh century continued this last type, and even after Heraclius' introduction of a regular hexagram coinage it remained in use for ceremonial purposes. Under Phocas it was issued in three denominations, weighing *c.* 3.5 g, *c.* 7 g and perhaps *c.* 14 g, though the last, of which five specimens from the same dies are known, is regarded by some scholars as a modern forgery.

The silver issues of Carthage have no specific mint-mark, but can be identified by style, by die position (frequently ↑→), and by evidence of provenance. They are remarkable for their variety. The only one to be struck in any quantity, since it was intended to displace the silver coinage of the Vandals, was Justinian's issue of *Vota* coins [48] of the same type as that used for ceremonial purposes in the East; they have CONOS for mint-mark and are of quite

different fabric from the issues of Constantinople. There were also fractions of these with V O T M in the four angles of a cross or a P between A and O [49], in both cases within a circle and a wreath. Under Justin II there were issues with a profile bust, a facing bust, and the seated figures of Justin and Sophia. The coins with a profile bust are of two denominations, a heavier one with a standing figure of Carthago and a lighter one with XX V in a wreath, both of these being Vandal in inspiration. They have commonly been ascribed to the Vandal king Hilderic (523–30), who was on friendly terms with Justin I, but on stylistic grounds their attribution to Justin II seems more likely. The coins with facing bust have on the reverse either FELIX RESPVBL(ica) in a wreath [51] replacing the older *Vota* inscription, or, on a lower denomination, a large monogram filling the field. Finally, the series with two seated figures has as a reverse type the upper half of the seated Constantinopolis of the solidus, accompanied by the inscription SALVS MVNDI [50].

Under Tiberius II there is the customary abandonment of pagan or half-pagan types and their replacement by Christian ones. One of his issues has a Christogram, as at Constantinople, but enclosed in a wreath; another has a cross on the inscription LVX MVNDI occupying the field. The most interesting of Maurice's types has a cross surrounded by the inscription \* SALVS MVNDI [52], for in its reverse type, in the lay-out of the inscription, and in the relative proportions of inscription and type it breaks away from ancient traditions and prefigures the coinage of much of western Europe in the Middle Ages. There is also a small coin (0.39 g) with an imperial monogram as reverse type. The coins of Maurice's son Theodosius have + |NM|CC (i.e. 200 nummi) or AME|NITA|SDEI [53] in a circle of dots and a wreath, or else two facing busts (Maurice and Constantina) on either side of a long cross with ACTI (= *Augusti*) in the exergue. Exactly when this varied coinage was struck remains uncertain. Under Phocas, there was a return to a relatively simple type, a P between A and O in a circle of pellets and a wreath, while the revolt of 608–10 saw coins with the consular bust of 'Heraclius' on the obverse and on the reverse either a VICTORIA inscription within a wreath or a cross with stars in the quarters. The great variety of different types that were struck at Carthage during the century is only matched by the rarity of most of them.

The Italian silver coinage has no indication of mint, but is customarily attributed to Ravenna rather than to Rome. Justinian's issues are very varied. Some [56–8] have marks of value in a wreath: CN (= 250), PKC (= 125) and PK (= 120), the coexistence of the two latter denominations being explained by the convenience of having both a fraction of the coin of 250 nummi and an exact multiple of the follis of 40 nummi. The coins are of two weight standards, one being half that of the other, the heavier ones having either nothing or an ornament above the mark of value and the lighter ones an ornament below it. It is conceivable that the heavier ones were full-bodied coins and the light ones only tokens, so that all CN ones would be siliquae – the solidus in Italy was reckoned at 6000 nummi – but it may equally be that the solidus was revalued, having risen to 12,000 nummi during the financial troubles of the mid-century and being subsequently, as a measure of monetary



reform, reduced to 6000 nummi. In addition to these coins with marks of value there are others with various Christian symbols – a Christogram [59, 60], a cross on globe, a star – in a wreath. Their values are uncertain, and the variations in the form of the wreath suggest that not all of them were struck at Ravenna.

After Justinian's death the quantity of silver struck in Italy began to fall off. Justin II issued coins with CN [61], with  $\text{P}$  between two stars, and with  $\text{P}$  on a globe; the weights of the two latter suggest that they replaced the former PKC and PK coins of Justinian. Under Tiberius II the only issues are of rare coins having a cross on steps in a wreath; since they give him the name of Constantine only they have sometimes been wrongly attributed to Constans II. Maurice had coins with  $\text{P}$  on steps or between two stars in a wreath; the CN and PK coins bearing his name are probably forgeries of the nineteenth century. Finally, under Phocas, Ravenna used the  $\phi\kappa$  of his name as a coin type [62], probably as a play on PK, the pieces in question being multiples of 3 folles.

## Copper coinage

### CONSTANTINOPLE (PLS 4–6)

Three major events mark the history of Byzantine copper coinage in the sixth century. They were the introduction of multiples of the nummus by Anastasius I in 598, the doubling of their weights in 512 to allow for the insertion of a 5-nummus piece in the pattern of denominations, and the introduction of a facing bust and dating by regnal years under Justinian I in 539.

The first of these was the most important. In the years prior to 498 the only small change consisted of tiny ill-struck coins, weighing 1 g or less, having on one face the profile bust of the emperor and on the other his monogram [77]. How exactly they were valued is uncertain, but it was many thousands (? 14,000) to the solidus, and they must have been highly inconvenient to use. In 498, at the instance of the Count of the Sacred Largesses, John the Paphlagonian, they were replaced by multiples of 40, 20 and 10 nummi, the 40-nummus piece being termed the follis. Though these were more convenient than the older coins they did not altogether please the public, since in weight they were far from being proportional to the old nummus: the light follis weighed only c. 9 g, probably being struck 36 to the Roman pound. Their most striking feature was their reverse type, which consisted simply of a Greek mark of value, M, K, or I [63–8], and contrasted sharply with the elaborate types which had always characterized Roman imperial coinage. In 512 the weights of the coins were doubled [72–6] and pentanummia having  $\text{E}$  (= 5) as mark of value were introduced [78, 79]. It was at first envisaged that the increase in module might permit of a reverse type instead of a simple mark of value, and some exceedingly rare coins having a seated Constantinopolis and M, K, or I in the field [69–71] are known, but apparently this did not give satisfaction and the mint

reverted to the mark of value alone. The earlier and lighter folles seem not to have been withdrawn but left in circulation, presumably at half the nominal value of the new coins. The later folles of Anastasius started as coins of about 35 mm in diameter, but this was apparently found to be inconveniently large and they were soon reduced to about 30 mm, though without any diminution in weight.

From the introduction of the follis in 498 to Justinian's reform of 539 the external appearance of the copper coinage, apart from the change in size, is remarkably uniform. The obverse type at Constantinople was normally a profile bust, even during the joint reign of Justin I and Justinian. The reverse type was basically a mark of value, though on one important series of pentanummia this was subordinated to a large Christogram occupying the major part of the field [100]. On the follis and decanummium the mark of value is accompanied by CON, i.e. *Constantinopolis*, but the half follis is without mint-mark, since the K of the mark of value could double as such in Greek (Κωνσταντινούπολις), and a mint-mark was only occasionally used on the pentanummium. The earliest folles of Anastasius are without officina letter, but the sequence A–E, i.e. 1–5, was soon introduced and was henceforward normal. Subsidiary symbols such as crosses, stars, crescents and pellets usually accompany the marks of value, especially on the follis. They in part served for dating according to five-year periods (*lustra*), but there are many complications, especially in the issues of the fifth officina. Particular forms of the star were sometimes preferred by individual officinae – \* by Officina E, ✱ by Officinae A and Γ, ✱ by Officinae B and Δ – and the profile bust on the larger folles of Anastasius is sometimes inexplicably accompanied by a Christogram in the field. Under Justin I there was a brief issue of pentanummia with Π [99], standing for both *penta* and *polis*, i.e. the name of Constantine's 'city'. *Concord(ia)* is found as a reverse inscription on decanummia of Anastasius [67, 68, 76] and Justin I, but its significance is unknown.

A major change in the appearance of the follis was introduced towards the end of Justinian's Year 12 (538/9) by Peter Barsymas, who had been appointed Count of the Sacred Largesses in November 538. The traditional profile bust of the obverse was replaced by a facing bust like that on the solidus. The basic design of the reverse was left unchanged, but the symbols to left and right of the mark of value were replaced by ANNO, inscribed vertically, and the regnal year in Latin characters, save for the 6, which is normally 5. The change can be taken as a belated application to the coinage of a provision of Novel XLVII of 31 August 537, which ordered that regnal years should be used in the dating of official documents. The introduction of the facing bust and of dating was limited to the higher denominations [80–2, 91], the decanummium having the date only [95]; the design of the pentanummium was left unchanged [101].

The reform of 539 was accompanied by an increase in the weight of the follis to c. 22 g, the diameter of the coins being c. 40 mm. Its value was raised at the same time from 210 folles to 180 to the solidus. The use of token coins of such high weight was no doubt largely due to the complete absence of any effective silver coinage – there was nothing between the follis and the

tremissis, as if we had nothing between a halfpenny and £1 or between a penny (cent) and a dollar bill – but the coins must have been extremely awkward to use. This very heavy follis lasted only four years, from Years 12 to 15, and thereafter the weight began to fall. Constantinopolitan folles of the later years of Justinian (Years 16–37) weigh *c.* 18 g, those of Justin II *c.* 13.5 g, those of Tiberius II, Maurice and Phocas *c.* 11.5 g. The decline was not uniform, however: Tiberius II issued large and very showy folles of *c.* 17 g in the year 579 – they are dated Years 5 and 6 – when he was consul, and Justin II's folles during much of his reign are inexplicably of two different weight patterns, the coins with a Christogram above the M being heavier than those with a cross. There were also intermittent periods of serious decline: folles of Justinian's last years were both underweight and issued in very small quantities. How the values of the coins altered in relation to the solidus we do not know, but it is evident that the folles of Phocas, weighing half that of the best years of Justinian, can scarcely have had the same value or purchasing power. The pattern of denominations was necessarily affected by the change in weight, since as the follis declined the lower denominations became too small to be struck for currency and went out of use. The nummus, which had been reintroduced under Justinian if not earlier, was last struck under Justin II, and the pentanummium was barely struck from Maurice's accession onwards. As the lower denominations began to drop out a greater variety of higher ones became desirable, and Tiberius II and Phocas both struck a 30-nummus piece [89, 90].

The obverse type of the follis, from 539 onwards, was as a rule the facing bust of the emperor, but under Justin II it was the seated figures of Justin and his wife Sophia [83, 92], who was effective ruler during the many years when he was incapable of exercising power, and in the first fourteen months of Phocas' reign it was the standing figures of Phocas and Leontia [87]. When Tiberius II assumed the consulship in January 579 he introduced a consular bust, which he retained on much of his copper coinage, though not on his gold, for the rest of his reign [84]. Maurice reverted to an armoured bust [85, 94], but with a paludamentum sometimes taking the place of the shield on the emperor's left shoulder. He also struck coins with a consular bust [86] in the last few months of his reign (Years 20, 21), having assumed the consulship for the second time on 6 July 602. Phocas followed the example of Tiberius in preferring a consular bust even in years when he was not technically consul because the office was no longer filled [88]. The effigy of Tiberius marks an important stage in the development of the Byzantine crown, which is shown with a frontal ornament surmounted by a cross. The lower denominations [93, 97] usually either reproduce the obverse types of the higher denominations or have a simple profile bust turned to the right. Justin II's pentanummia have a monogram of himself and Sophia ([102]: IOVCTINOVKAI COΦIAC), and one rare issue of Maurice has a monogram of his full name (MAVPIKIOV TIBEPIOV). The 30-nummus piece of Tiberius [89] and the decanummium [97] have what appears to be a facing bust wearing a paludamentum, but the part from the neck downwards is an ordinary profile bust turned to the right – evidently the die-cutter simply did what he was accustomed to do – while only the head is facing. A rare decanummium of Justin II – it

has usually been ascribed to Justin I – has a standing figure of the emperor, apparently to balance the vertical mark of value on the other face of the coin [96]. The contemporary poet Corippus, writing in praise of the emperor, has a curious conceit on the parallel between the initial of his name and his erect figure standing uplifted on the shield at his coronation.

The regular reverse types are the marks of value, M (or  $\mathfrak{M}$ ), K, I, and  $\mathfrak{C}$  [104], or XXXX, XX, X and  $\mathfrak{U}$  [103] under Tiberius and Phocas. The  $\mathfrak{M}$  and XXXX created some difficulties for the coin designers: it was usually necessary to place the officina letter after the CON [84, 87–90, 93], while under Phocas the mint found it convenient to place the ANNO above the XXXX instead of to its left [88]. The follis is always dated from 539 onwards, the pentanummium never, but the presence or absence of dates on the half folles and decanummia is quite unpredictable. The number of officinae was normally five, but higher numerals are occasionally found. Whether the total of officinae was occasionally expanded, or whether coins bearing these erratic figures should be regarded as irregular issues, is not clear.

#### THESSALONICA (PL. 7)

The copper coinage of Thessalonica consists mainly of half folles. Folles were only struck at the beginning and at the end of the period in which the mint was active, and decanummia and pentanummia for a few years, and apparently in small numbers, in the middle. The mint-mark is normally TCS; THESSOB occurs under Justin I and a  $\Theta$  or S (for *Saloniki*) on pentanummia. There are no true officina letters: the  $\mathfrak{C}$  which occurs on some of the folles of Justin I is presumably, like the inappropriate OB in THESSOB on coins of copper, due to the ignorance of a local die-sinker. Features of the coinage are the unusual denominations employed under Justinian, the variety of supplementary sigla used under Justinian and Justin II, and the occasional and very unusual use of Greek instead of Roman numerals for dates.

The mint was opened for multiples of the nummus under Justin I, but only the folles, with mint-mark THESSOB, are at all common [105]. The use of a very characteristic eight-pointed star and the style of the bust allow one to identify some rare half folles [106] and pentanummia (stars above and below the horizontal bar of the  $\mathfrak{C}$ ) of this mint; presumably decanummia also exist. There are also 3- and 2-nummus pieces (*MIB* I, Pl. 11. 74, 75) which show that the taste for unusual denominations was not confined to Justinian's reign.

Justinian's coins, apart from a follis of Justin I from a die which has been altered to read *Iustinianus*, fall into two classes, an undated series with unusual denominations (16, 8, 4, 2 nummi [107–11]; also exceptionally 10 nummi and a nummus with A P in monogram) and a dated series of Years 37–9 [112, 113]. On the first of these series the mark of value (IS, H,  $\Delta$ , B) is flanked by the letters A P (rarely A P I) which should perhaps be interpreted ἀργύρια, a local equivalent of *denarii* or *nummi*, despite the fact that the unit was no longer one of silver. The coins should presumably be dated over the whole period 527–63; it is unlikely that the mint would have been open for only a few years at the beginning and again at the end of the

reign. The weights are very variable, but there is not enough evidence for us to relate them to the weight changes of Justinian's coinage elsewhere. The marks of value IS and H are often surmounted by sigla (+, . +., ꝥ, .A., ✱. ✱, A. ω, Iω K, etc.), or the IS accompanied by an I or a symbol resembling a *psi* [108], the significance of which is unknown. The mint-mark TCS is found only on the 16-nummus piece in the early coinage, but occurs on both the half follis and decanummium in the later one.

The second coinage of the reign consists of half folles (facing bust, Years 37–9 [112]), decanummia (profile bust, only Years 37 and 38 [113] recorded), and pentanummia with an S beside the mark of value. The half folles of these years and of the next reign are very frequently found overstruck on early 16-nummus pieces.

Justin II's coinage is of two types, one with facing bust [114], of Years 1–6, and the other with the seated figures of Justin and Sophia [115], of Years 4–13. Δ is used as the date numeral for Year 4 and Ε–Η as alternatives to 4–4III for Years 5–8. From Year 4 onwards the customary cross above the K is often supplemented by ΘC, ΘKC, ΦC, M or C which it has been suggested represent Θεός, Θεοτόκος, φῶς, Μαρία and σταυρός ('cross'). The decanummia (dated) have a profile bust [116]; the undated pentanummia have the customary monogram of Justin and Sophia on the obverse and a Θ accompanying the mark of value on the reverse [117].

Tiberius II's coins are limited to half folles having as obverse type the seated figures of himself and Anastasia in place of those of Justin II and Sophia [118]. Maurice's earliest coins are similar, with two varieties of seated figures, but before the end of his first year a type with facing bust, like that employed at other mints, was introduced and continued, with no more than a change from crown to helmet in Year 6, to nearly the end of the reign [119]. There are consular folles dated Year 20. Similar folles were struck under Phocas [121], Years 4 and 5 being recorded, but the bulk of this ruler's coinage still consisted of half folles, with armoured bust and K [122], of Years 1 and 2, or two standing figures and XX [123], or consular bust and XX, the two latter series being undated. Rare decanummia with profile bust were occasionally struck in the later years of Maurice's reign [120], but none of Phocas are known.

#### NICOMEDIA AND CYZICUS (PLS 4, 8)

Only copper coins are known for Nicomedia and Cyzicus, and the products of the two mints are so similar that they can best be treated together. The coinage consists mainly of folles and half folles: the lower denominations were only sporadically struck even in the first half of the sixth century, and after 565 they practically disappear. No decanummia of Justin II are known – they are rare even for Constantinople – and there are no identifiable decanummia or pentanummia of later reigns, though they may be hidden amongst those attributed to Constantinople, which are usually without mint-marks, and in due course will be separated out. The mint-marks are at first very variable, but eventually settle down to NIKO and KYZ,

or (K)YZ on the half folles of Cyzicus, where the K of the mark of value could serve in a dual capacity [133]. Both mints were normally divided into two officinae, A and B. From the reign of Justin II onwards there are a number of coins which, despite their Nicomedian and Cyzicene mint-marks, do not fit into the regular pattern of issues of either mint. They are briefly discussed on pp. 76–7.

Nicomedia was the first of the two mints to be opened. Under Anastasius coins of both the small and the large series were struck, the mint-marks being NIC [64] or NICOMI on the folles, NI on the half folles and decanummia [66, 68], and N on the pentanummia. A few coins are of special interest. One series of folles [64] has  $\Delta$  below the M (so reading NICOM $\Delta$ ) and half folles [66] with O above and  $\Delta$  below the K (i.e. NIKO $\Delta$ ); another variety of follis has Anastasius' monogram in place of an officina mark. There are also nummi, perhaps dating from before 498, with NIC below the monogram. Under Justin I the officina letters A and B appear, the mint-mark being now NIKM [125]. On the two types of pentanummia, one with a large  $\epsilon$  and the other with a Christogram and a small  $\epsilon$ , the mint-mark is a simple N [126]. Folles and perhaps other denominations were struck in the joint names of Justin I and Justinian I, but only folles are known of the first coinage (527–39) of Justinian.

Cyzicus was opened as a mint well after Nicomedia, and its earliest products are eccentric in several respects. No coins are known for Anastasius, for the joint reign of Justin I and Justinian, or for the first years (527–39) of Justinian. For Justin I alone, on the other hand, while the coins themselves are rare, there are no fewer than three types of follis, two of what one may call the regular type – a large M with officina letter and mint-mark normally placed, but one with a cross above and to each side and the other with a  $\Phi$  on a globe in the same positions – and the third irregular, the M and officina letter being placed between K and Y and having IN $\Delta$  or IN $\Sigma$  in the exergue [124]. It is generally supposed that these are to be interpreted as *Indictione 4* and *Indictione 5*, i.e. 525/6 and 526/7, the S being an abbreviation mark, though the dating of imperial coins prior to the issue of Justinian's Novel XLVII does not seem very probable. Only one type of half follis, like that of Nicomedia but with KY in place of NI, is known.

Both Nicomedia and Cyzicus played a major role in the reform of 539, their large folles of Years 12–15 being exceptionally broad and handsome coins. The mint-mark at Nicomedia was changed from NIKM to NIKO in Year 12, then in the same year to NIK [127], and finally (Year 15) back to NIKO. Folles and half folles of the later years of the reign are rare and in some years may not have been struck at all. At Cyzicus no half folles later than Year 29 are known, and no folles later than Year 31. Decanummia, on the other hand, are at both mints practically confined to Years 30 ff.; they are very small and badly struck [131]. Heavy pentanummia, with KY beside the mark of value, were struck at Cyzicus in the years immediately following 539, but no corresponding coins have been recorded for Nicomedia.

No folles or half folles of either mint are known for Year 1 of Justin II, but there is, surprisingly, a dated decanummium of Cyzicus [135], though this denomination was subsequently discontinued. The folles of Years 2–13 are modelled on those of Constantinople,

but there are sometimes sigla (cross, star, Christogram) between the heads of the seated figures and there is often a scroll-and-pellet design in front of the dais on which the throne is placed [129]. The half folles of Cyzicus have an exergual line with KYZ instead of combining the mark of value with YZ. The pentanummia are like those of Constantinople but have an N or a K [128] instead of an officina letter beside the mark of value. The coinage of Tiberius II at both mints follows the Constantinopolitan pattern.

The coinage of Maurice presents few features of note. There is the same rough sequence in the use of *Tiberius-Mauricius* [133], *Mauricius* [130] and *Mauricius-Tiberius* [132] inscriptions as at the capital, and the same irregularities in the design of the emperor's bust and helmet, the former being shown sometimes with a shield, sometimes with a paludamentum, and the latter being sometimes plumed, sometimes surmounted by a cross. Both mints followed Constantinople in the issue of consular coins in 602. The Nicomedian coins of the first years of the reign have often, quite improperly, a *Constantinus* inscription, i.e. one appropriate to Tiberius II, but their dating and other features show that they belong to Maurice's reign and not to that of his predecessor. Half folles of both mints, with the exception of some anomalous coins of Year 10, are without mint-mark, so that coins with officina letters A and B can only be separated from those of Constantinople and from each other by comparing their designs with those of the folles of these mints for the same years. The extensive series of illustrations in the first volume of the Dumbarton Oaks catalogue forms the only satisfactory guide, but the two half folles of Cyzicus and Nicomedia [133, 136] on Pl. 8 show how the styles of the two mints could differ, and a comparison of the first coin with a signed follis of Cyzicus of the same period of the reign [132] shows at which mint it was struck. In the later years of Maurice's reign the style of the Cyzicene coins and the accuracy of their inscriptions are normally much superior to those of Nicomedia, where the plume of the emperor's helmet tends to become a laterally flattened triangle and the inscriptions a meaningless succession of ill-formed letters. Decanummia [130, 137] and pentanummia were struck at both mints.

Two series of coins were struck under Phocas, one (Year 1) with the standing figures of Phocas and Leontia and the other with the consular bust of Phocas [134: Years 2–8]. On coins of Year 1 from Nicomedia the inscription reads *ΘΜ FOCA INPERAV*, which also appears in a blundered form at Cyzicus and Antioch. Probably it was meant to signify *INPER(ator) AV(gustus)*, the die-sinker having misunderstood the *PER(petuu)* which at Constantinople had been substituted for the traditional PP on the solidus and other denominations.

#### ANTIOCH (PLS 4, 8)

The mint of Antioch was second in importance only to that of Constantinople, as one would expect of the capital of the great manufacturing province of Syria. Its output of copper coinage was enormous. It opened for the striking of folles, however, rather later than did

Constantinople and Nicomedia, for there are no coins of the light series of Anastasius. The number of officinae was theoretically four, but in the second half of the sixth century the vast majority of coins were struck in officina Γ, and even in the early decades this officina seems to have been more important than the others. Whether its output was that intended for the city itself, or how the phenomenon is to be interpreted, we do not know. Higher officina letters (S, Z, H) are occasionally met with, but as in the case of Constantinople their explanation is obscure. The mint mark was ANTIX (for Antiocheia), variously abbreviated, up to 528 [75, 138], when in the hope of averting earthquakes the name of the city was changed to θεούπολις, 'City of God', which on the coins is abbreviated ΘΕΥΡ, ΘΥΙΟ, or some similar form. On the lower denominations the *polis* element in the name was often regarded as sufficient (Π, Ϟ, Ρ [cf. 142, 146, 148]), the Ϟ being sometimes transformed into a Q on coins of Year 5 so that it could do duty as *quinto* [144]. The pentanummia are normally without mint-mark, but differ in style and sometimes in type from those of Constantinople. The occurrence of large numbers in the Antioch excavations has made possible their identification.

The early copper coinage requires no particular comment. The follis type was the same as at Constantinople, but the lettering is usually larger and coarser and there is often a cross on the emperor's diadem. The crescent plays a more prominent role in the subsidiary signs at Antioch than it does elsewhere, always occurring on the right of the M, so that this is placed between a star and crescent representing the sun and moon [138, 139]; it can also take the place of a star, as on an anniversary follis of Year 20. During the joint reign of Justin I and Justinian the obverse type was two busts instead of a single profile bust, as elsewhere. A liking for 'two figure' types, when they could be employed, was indeed characteristic of the mint. Pentanummia under Justin I and the early years of Justinian have on the reverse the seated figure of the Tyche of Antioch under an arch [145], one of the rare examples of a definitely pagan type in sixth-century coinage but presumably tolerated because it represented a specific work of art, a statue by the Hellenistic sculptor Eutychides, a pupil of Lysippus. One of Justinian's early types, struck in the 530s, has on the reverse a seated statue of the emperor [139, 141], to whom the city was indebted for generous help in its rebuilding after the great earthquake of 528.

Justinian's reform was only introduced at Antioch in his Year 13, not Year 12 as in the other eastern mints; it is this that dates it to the early months of 539. There are no coins of Years 14, 15, 17, 18 or 19. The city was sacked by Chosroes in 540 and all its inhabitants carried off into Persia, where a new 'Antioch' was founded on the Tigris for their reception. This sufficiently accounts for the absence of any dated coins of Years 14 and 15, but it is not clear why the second interruption took place, for coins of Year 16 do exist. An unusual feature of the minting is the way in which the mint-mark of the copper [140, 142] was changed, even if very slightly, at five-year intervals, as is shown in Table 2. This pattern fits into Dr Hahn's view of regular five-yearly changes (see p. 60) and went back to the beginning of the reign, since four variant forms occur between 527 and 539 (ANTIX, +ΘΕΥΡ, +ΘΕΥΡ+, ΘΥΙΟΑΣ) and the last of these was continued by the ΘΥΙΟ of the



Table 2 Antiochene mint-marks, 539–65

Regnal years	Dates	M	K	I
13	539/40	ΘVΠO	ΘV	—
16	542/3	ΤΗΕΥΡΟ	ΤΗ	ΤΗΕΥΡΟ
20–4	546/7–550/1	ϠΗϠΠ	Π	ϠΗϠΠ
25–9	551/2–555/6	ΤΗϠΠ	Π	ΤΗϠΠ
30–4	556/7–560/1	ΤΗϠQ	Q	ΤΗϠQ
35–8	561/2–564/5	ΤΗΕϠΡ	Ρ	ΤΗΕϠΡ

coins of Year 13. The weights of the later issues of the reign are rather lower than those of Constantinople, and in 561/2 there occurred a sudden change in the inscription, which from a relatively careful rendering of DN IVSTINIANVS PPAVC suddenly became an unintelligible jumble of badly formed letters. There was also a decline in the standard of the design of the imperial bust. One must assume some radical change in the personnel of the mint, possibly resulting from illiterate workmen having to be taken on after an outbreak of plague which swept over the eastern provinces of the Empire in 560. The pentanummia of most of the reign are distinguished from those of Constantinople by having a short upright on the cross-bar of the mark of value, transforming it into a cross [149], but in the last phase of the coinage an imperial monogram was placed inside a C [150], presumably to compensate for the unintelligibility of the inscription on the obverse.

Under Justin II and Tiberius II the types follow the general pattern of those of the capital, but the details differ. The seated figures of Justin and Sophia support between them a long cross above a globus [143], a feature absent from the coinage of Constantinople. In 566, overlapping Regnal Years 1 and 2, when Justin II was consul, the date figure is accompanied by one or two stars, a feature repeated on the tenth anniversary of the occasion [147]. The inscriptions continue to be a blundered jumble of letters, as under Justinian. The persistence of this feature under Tiberius II, whose main type, at Antioch as elsewhere, is a consular bust, led Wroth into great confusion over the distinction between his coins and those of Maurice, for during the first eight years of Maurice there is little difference between the blundered version of the name of the two rulers. Other criteria are consequently necessary to distinguish between them, the best being the ornament on the crown, that of Tiberius [144] having a cross (Regnal Years 4–8) and that of Maurice [146, 148] a trefoil (Regnal Years 1–8). In Maurice's Year 8 the inscription was somewhat improved, and though not correct (ΘΝΜΑΥΓΙ ΓΝΡΑΥΤ, presumably intended for ΘΝΜΑΥ ΤΙb PPAVC or ΘΝΜΑΥΡΙ ΤΙb PAVC) did at least remain consistent for the remainder of the reign. Pentanummia of the three emperors continued to have on the obverse a monogram and on the reverse a mark of value, initially an Ε, subsequently (Tiberius II, first year of Maurice) a Ϡ, later an Ε again. The joint monogram of Justin II and Sophia is the same as that of the other eastern mints, apart from the positions of the Φ and the Ϡ being sometimes interchanged, but the Ε is always

accompanied by a cross and there is a pelleted instead of a linear border. Under Tiberius II there was first a monogram with the letters of *Konstantinou* [151], subsequently one with those of *Tiberiou Konstantinou*, while Maurice started with one of *Maurikiou* and subsequently used two different ones incorporating the letters of *Tiberiou* and *Maurikiou*.

Phocas' Antiochene coinage is superior in style and fabric to that of his other mints, and is peculiar in the retention of the two standing figures of Phocas and Leontia on the obverse [152] as late as Year 7, though elsewhere it disappeared in Year 2. His pentanummia have his monogram and an € with a cross. His higher denominations of Year 8 are the last Byzantine ones to be struck at Antioch, since the mint, either because of the Persian threat or through the transfer of its personnel to Jerusalem, was closed on Heraclius' accession.

#### ALEXANDRIA (PL. 10)

Alexandria, the capital of the diocese of Egypt, had been an important mint under the Principate, but its huge issues of tetradrachms of increasingly poor quality came to an end in AD 295. Under Diocletian it was incorporated into the newly organized imperial system, its products being distinguished from those of other mints by the mint-mark ALE. By the end of the fifth century it was presumably only producing nummi, though none later than Leo I are actually known. When in the sixth century it started to strike multiples of the nummus, these were not the follis of 40 nummi and its fractions, as elsewhere, but dodecanummia of 12 nummi and their halves and quarters of 6 and 3 nummi. The local monetary status of Egypt had in fact been successfully re-established, and it seems likely that the unit of 12 nummi was chosen because this represented the value commonly attached to surviving billon tetradrachms – they were really of poor quality copper or potin – in everyday life. Certainly the coins of the mid-sixth century bear a general resemblance in size and fabric, if not in the interest of their types, to the coins of 300 years earlier.

Wroth attributed the earliest dodecanummia to Justinian, but there is at Dumbarton Oaks a piece of good style which Ratto attributed, very plausibly, to Justin I [153], those of Justin II being much inferior in weight and workmanship. The type remained essentially unchanged throughout the century: on the obverse the emperor's name and a profile bust, on the reverse the marks of value IB on either side of a cross; with the mint-mark in the exergue [155]. Minor variations were introduced under Tiberius II – the emperor sometimes holds a short cross, or the cross on the reverse is sometimes replaced by a ₴ on steps [157] – but his coins are unusually abundant for so short a reign and it seems probable that some of them, as happened elsewhere, were struck under Maurice. (The inscription includes only the *Constantinus* element in Tiberius' name.) No coins are known with the name of Phocas, but small IB coins with completely blundered inscriptions are customarily ascribed to him, though some of them are probably later, and there is at Dumbarton Oaks one with a facing bust that is probably his also [158]. Coins with S [156] and Γ instead of IB are known in this period only for Justinian, apart from a single specimen with S doubtfully assigned to Justin

II. These lower denominations have no mint-mark, but are assignable to Alexandria because of their fabric and because they belong to the same system of values.

Justinian's reform of 539 made a brief impression at Alexandria, for there exist rare coins of this mint with facing bust and mark of value  $\Lambda\Gamma$  [154]. They can probably be dated 539–43, like the heaviest series of folles elsewhere. Some scholars have interpreted  $\Lambda\Gamma$  as meaning three *litra*, the *litron* being a unit occasionally referred to in papyri, but the more general view is that it is the numeral 33, i.e. 33 nummi, which though not an exact multiple of the dodecanummium was one-third of a hundred and in that way conveniently related to the solidus.

#### CARTHAGE (PL. 11)

Carthage was the most important single mint in the West, but its output, though large, was intermittent. There were in each reign short periods of great activity, followed by longer intervals in which few coins were struck. The higher denominations usually have a distinct mint-mark (KART, CART, KAR, CAR, etc.), though as at Constantinople the mark of value of the half follis could be allowed to double as a mint initial. Even when there is no specific mint-mark, as on some of the lower denominations, the attributions usually admit of no doubt, for the style and even more the fabric of Carthaginian coins are very distinctive. The flans tended to be thick, with rounded rather than jagged edges, and rather smaller than the dies, so that parts of the inscriptions are often off-flan, and a 90° die position, or something approaching it, is common. So is a border consisting of a wreath with a linear or dotted circle inside it; this is a feature limited to Byzantine coins from North Africa. The earliest folles of Justinian sometimes have what appear to be officina letters (A, B,  $\Gamma$ ) or marks serving in their place (e.g. one or more pellets), but it is doubtful if there was any real organization of the mint into officinae. On the folles and half folles of Justinian's reformed coinage and on some of those of Justin II the letters SO or S occupy the place on the coins which would normally be occupied by an officina letter. They are perhaps to be interpreted as *SO(la)* or *S(ola) O(fficina)*.

The Byzantine recovery of North Africa dated from September 533, when Belisarius reoccupied Carthage, and the bulk of Justinian's coinage belongs to the nine years 533–42. It consisted very largely of folles, probably because the issue of these heavy coins was the quickest and cheapest way of replacing the coinage of the Vandals. They were indeed struck in such quantities as virtually to satisfy the need for this denomination for many years to come. The coins were of the same types as those current in the East, but the die-sinkers were presumably recruited locally and had at first very distinctive methods of working, one of them preferring a rather squat bust with an unbroken obverse inscription [168], a feature very unusual on sixth-century coins, and another decorating it with a large cross or Christogram [169], probably intended as a manifesto against the Arianism of the defeated Vandals. The half folles with profile bust, where the K served as mint-mark, can be

distinguished from those of Constantinople by their style and by the absence of an officina letter, though on some there is a C in the field to confirm the identity of the mint [170]. Decanummia and pentanummia of the early period exist, but they are rare and identifiable only by style and fabric. There are also nummi with the mark of value A.

Justinian's reformed coinage was introduced at Carthage, as at Antioch, only in Year 13, and is practically limited to Years 13 and 14, specimens of which are common. The folles [171], half folles and decanummia [175] are dated; the pentanummia which on stylistic grounds can be best attributed to these years are undated, and have as reverse type an € with a cross in a circle within a wreath [172]. The nummi of the same issue have VOT XIII or VOT XIII [178] in a circle and wreath, a novel use of the *Vota* formula in the sense of *Anno*. Later dated coins are for the most part rare – there are half folles of Year 22, decanummia and pentanummia with a *Victoria* reverse inscription [173, 174], probably referring to John Troglita's victory over the Moors in 548.

Justin II's coinage of Carthage is interesting because of its varied types and inscriptions. We find the facing busts or seated figures [176, 183] of Justin and Sophia, inscriptions incorporating the word *Vita* as part of a formula of acclamation, and Sophia's name being used on the coins instead of merely her effigy, as on folles of Constantinople. The moneyers sometimes exercised their ingenuity by using the emperor's initial as the mark of value [177] or, on one issue of pentanummia, inserting an € into the imperial monogram. The prominent place given to NM (for *nummi*) is a reversion to Vandal usage.

There are, inexplicably, no Carthaginian copper coins of Tiberius II. Several different types were struck under Maurice, the follis [180] being exceedingly rare and the lower level of the denominational pattern [181, 182] being strengthened by the introduction of a 2-nummus piece [179], presumably intended to replace the now obsolete nummus. An innovation on some of the copper coins is indictional dating in the form IND III or IND S [185], the last letter probably standing for *sexta* rather than *secunda*. Phocas' coins are common, some having an obverse inscription ending NS, i.e. *Indictio sexta* (= 602), while the folles and half folles of another issue are dated to his fifth regnal year (ANNO €), the € becoming immobilized in the future. After the revolt of North Africa against Phocas in 608 Carthage became the chief mint of the rebels, the obverse type of the copper coins consisting of a facing bare-headed bust of 'Heraclius' wearing consular robes and an inscription making no allusion to any imperial title [184]. The reverses reproduce those of the last issue of Phocas, the lowest denomination being a 2-nummus piece having the mark of value B between two pellets.

#### ROME (PL. 12)

The copper coinage of Rome resembles that of Carthage in that it initially consisted very largely of folles, subsequently of smaller denominations. The earliest issues [186], probably struck in 537 immediately after the occupation of the city by Belisarius (December 536), are

of fine style and workmanship; there is no exergual line or officina letter, the mint name is complete (ROMA), and the reverse type is surrounded by a wreath. Later the style becomes much cruder, with stylized hair and a blanket-like paludamentum, and the officina letter A appears below the M [187]. The corresponding half folles [188] are without mint-mark but are easily identifiable by their style. Both folles and half folles are of rather thick fabric, reminiscent of the coinage of Alexandria. The decanummia have an I sometimes accompanied by ROMA [190] but more usually without one. The pentanummia have on the reverse a simple V [189] and the nummi a cross between two stars [199], in both cases the whole type being surrounded by a wreath. These coins were presumably struck in the early 540s, but the chronology is uncertain: the city was besieged five times in the course of the war and was actually in Ostrogothic hands for a few months in the winter of 546/7 and again between January 550 and the summer of 552. After its final recapture by the Byzantines a facing bust was introduced as obverse type. The half follis [194] is dated Year 31, i.e. 557/8, which gives an approximate date for the other denominations. The follis, with the letters ROMA disposed on either side of the M [193], is of extreme rarity, but half folles are moderately common. The decanummia, with I between two stars in a wreath [195], the pentanummia (V in a wreath, with profile bust) and the nummi (lion r. [200]) are without mint-mark, and it is not certain that all of them belong to Rome. There are also nummi with a P between A and ω [201].

The coinage of later emperors consisted mainly of half folles, the normal type being XX with a cross above and ROM in the exergue. Coins of this type were struck by Justin II [196], Tiberius II [197] and Maurice [198], but are not known for Phocas. Decanummia have a simple X in a wreath [202, 203]. No folles exist, and the issue of pentanummia seems to have ended with Justin II, the type continuing that of Justinian and having a V [191], sometimes with a star above [192], in a wreath. Wroth ascribed these coins to the Ostrogoths and the time of Justin I, but the attribution to Justin II seems preferable. The contraction of Byzantine territory in Italy, in the face of Lombard attacks, is sufficient to explain the limited importance of the mint of Rome in the late sixth and early seventh centuries.

#### RAVENNA (PL. 13)

Ravenna was occupied by the Byzantines in May 540, after the surrender of Witigis, but the recall of Belisarius was immediately followed by the loss of most of north Italy. The definitive establishment of a Byzantine mint in the city seems to belong to the last years of Justinian's reign, after the end of the Ostrogothic War in 554. There are dated folles of Year 34 (= 560–1) with the mint name, as at Rome, inscribed in full [209], and half folles of Year 33 on which it is abbreviated to RAB [210]. Dated decanummia, having an I between ANNO and the date, are known for Years 26–38 [211 of Year 35]; they are without mint-mark, but are Italian in general appearance and have a tightly plaited wreath quite different from that of the coins of Rome. No lower fractions are attributable to Ravenna with any confidence.

No copper coins of Justin II or Tiberius II are known with the mint-mark of Ravenna, but decanummia of Tiberius with an I between two crosses have the tight wreath found on the decanummia of Justinian and should probably be attributed to the mint. Under Maurice and Phocas there are folles and half folles with mint-mark and relatively original designs, the date being in one case written in full (ANNO QVINT[o], the last word sometimes QNNT) or the letters of the mint being disposed in various ways around the field [213–16, 218–21]. Under Maurice there are decanummia, without mint-mark, having on the obverse an unusual type of helmeted bust [217]. There was no organization into officinae, but there are sometimes isolated letters occupying positions where one would expect these to be. An € on one issue of Maurice [214] duplicates the regnal date, i.e. Year 5, and an S above the M [213] and an SS above the XX [215] – the letter is repeated for reasons of symmetry – on some coins of Maurice probably stands for *Sola*, like the S on some of Justinian's folles and half folles from Carthage.

#### MINOR MINTS

The nine mints which have just been described were of a virtually permanent character and usually issued a wide variety of denominations. Others were opened only occasionally, as need arose, and sometimes in circumstances of which we are ignorant. Catania can best be included under this head, since although it remained active for nearly half a century it only came into existence in 582.

#### *Catania (Pl. 12)*

Decanummia dated by regnal years began to be struck in the first year of Maurice – undated pentanummia of Tiberius II with the mint-mark CAT (*MIB* I, Pl. 15.66) are in my opinion nineteenth-century forgeries of Cigoi – and continued to be issued throughout his reign [205, 206]. There are also undated pentanummia [207]. The mint-mark is always CAT. Similar coins continued to be struck under Phocas, but they are rare and only Regnal Years 3 and 4 [208] have been recorded for the decanummia. Nothing is known of why a mint should have been opened at Catania in 582/3, but the city was the provincial capital and while Belisarius' troops, landing in Sicily in 535, had apparently left behind in the island a plentiful supply of folles, there was presumably a shortage of small change later in the century.

#### *Syracuse*

In addition to his dated decanummia of Catania, Maurice also struck undated decanummia in which the letters SECILIA are fitted into the angles of a large X [204]. The mint can scarcely be Catania, and since Syracuse was a mint in the seventh century it seems likely that these coins represent one of its earliest issues. Hahn also attributes to Syracuse some folles and decanummia with CON of Year 21 of peculiar style (*MIB* I, Pl. 27.139, 142), as well as

the indeterminate Italian decanummia with an I between two crosses [227], but despite the resemblance between the imperial bust on these coins and that on the SECILIA decanummia, there seems to be no hoard evidence in favour of their Sicilian origin.

*Cherson (Pl. 10)*

Two quite separate groups of coins originated in this city. The first consists of pentanummia struck under Justin I and Justinian. Justin I's coins and the earliest ones of Justinian [159] have on them a profile bust and a standing figure with the inscription VICTOR; they are commonly found in the Crimea and not elsewhere. They were replaced, probably in 539, by slightly heavier ones having on the reverse a monogram combining the name of the city of Cherson (XEPCΩNOC ΠOΛIC) with a prominent E as mark of value [160]. Presumably, as with Maurice's coinage in Sicily, the striking of such pentanummia is to be explained by the fact that small change reached peripheral provinces in insufficient quantity.

Later in the century, or perhaps only in 602, these pentanummia were succeeded by coins of higher denomination whose precise dating is uncertain. These have as obverse type the standing figures of an emperor and empress and as reverse type a smaller standing figure and a mark of value. The inscriptions consist of the name of Maurice or of the city, and the marks of value are either M [162] or H (= 8) [161] on the follis and K or Δ (= 4) [163] on the half follis, in the cases of H and Δ the basic unit being the pentanummium and not the nummus. If the coins all belong together it would seem reasonable to regard them as an insurrectionary coinage struck at Cherson in 602, the intention of the rebels having been initially to depose Maurice in favour of his son Theodosius and not of the upstart adventurer Phocas. An alternative view, favoured by recent scholars, is to attribute the first coins to Justin II, Sophia and Tiberius II, and to leave only the others to the 590s or to 602. In either case the coins must have reached the rebel troops in the Danubian region before Phocas set out for Constantinople, since the obverse type of his first copper coinage is modelled on that of the 'family coinage' of Cherson.

*Cyprus (Pl. 10)*

During the revolt against Phocas in 608–10 there was a small issue of copper coins in Cyprus, probably at Constantia (Salamis), having as obverse type the busts of Heraclius and his father in consular robes and the mint being identified by KVIΠOY on the follis and KVIΠΘ or KVIΠ' on the decanummium. Folles [167], half folles and decanummia are known, all of extreme rarity. They are dated ANNO III or ANNO XIII, the first being apparently calculated from the beginning of the revolt, the second being an indictional year.

*Alexandretta (Pl. 10)*

Folles with the facing consular busts of Heraclius and his father are known with the mint-mark AΛEXAN(Δ), which evidence of provenance suggests should be identified with

Alexandretta in Syria rather than with Alexandria in Egypt [164, 165]. They are dated ANNO XIII or XIII, the figures standing for indictional years and the coins having all been struck in 610, when these overlap. The corresponding half folles [166], which are identical in style, are without mint-mark but have an A below the mark of value; their inscription, style and provenance make their attribution certain. A few folles dated Year 14 show the busts no longer bare-headed but wearing crowns with pendilia; these were presumably struck late in 610 after the news of Heraclius' coronation had reached the mint [165].

*Uncertain Italian mints (Pl. 13)*

From Justinian onwards there exist several issues of small fractional coins which can be attributed to Italy on grounds of style and provenance but which are not obviously the products of either Rome or Ravenna, though it is possible that some of them belong to one or other of these mints. The commonest of these unattributed types under Justinian is a decanummium having as reverse an elaborate cross with a star in each quarter [212], while under Tiberius II and Maurice there are ones with a stocky pillar-like I having a cross on either side [226, 227].

*Uncertain Illyrian mint (Pl. 13)*

Under Justinian there were struck a series of coins having a simple M, K or I on the reverse, and no indication of mint at all [222–5]. They are all much smaller and lighter than the normal coins of the same denominations elsewhere, the follis weighing c. 6 g, the half follis from c. 4 g to c. 2 g, and the decanummium c. 1.5 g, the weights, especially those of the half follis, being very variable. Stylistically they are closely related to the coins of Ravenna of the 550s [cf. 210 with 223–5], but against their having been struck in this mint, perhaps in the 540s, is the absence of any mint-mark. Another possibility is Salona, where they have been found in some quantity and which was for a time the headquarters of the Byzantine army operating against Totila. I am more inclined, however, to regard them as the product of a military mint operating in Illyricum and not attached to any particular locality. They must belong to the 540s or early 550s, for the folles have the facing bust introduced in 539 and the half follis is occasionally overstruck on Ostrogothic coins.

ANOMALOUS COINS (PL. 12)

The great majority of sixth-century copper coins fit into a relatively simple pattern of mints and issues, even if, in a few cases, the mint cannot be precisely identified. But there are also some groups of anomalous coins which are outside the normal pattern in that the mint indication is for one reason or another open to doubt. Such coins may have, for example, the mint-mark of Constantinople or Cyzicus, while diverging altogether from the regular products of these mints and in some cases closely resembling those of some other locality.



How this phenomenon is to be interpreted, or whether indeed it admits of any general interpretation at all, is difficult to say. An overworked mint contracting out work to another may sometimes be the explanation, though on the evidence of find spots it cannot always be so. Military mints recruiting personnel from the nearest mint but striking in the name of Constantinople is often a more likely hypothesis. Some anomalous coins may simply be contemporary forgeries. Bellinger briefly discussed some of the groups in connection with the Dumbarton Oaks catalogue, but his explanations involved implausible stylistic groupings and did not win general acceptance. Hahn classed many of the coins together under the heading *Moneta militaris imitativa* in the tables of regnal issues in the second volume of *MIB*. The main groups are as follows.

(1) *Justinian*

Folles of Year 14 and half folles of Years 14 and 15, having CON in the exergue below the mark of value [228, 229]. They differ from the coins of Constantinople in their size – most of them are very much smaller – and style, in the layout of the date numerals, and for the half folles in the presence of CON; on true half folles of Constantinople the K itself serves as mint-mark. Bellinger attributed these anomalous coins to Constantine in Numidia, but there is nothing African in their style or in their provenance where this is known. A military mint in the Balkans during the Ostrogothic War is much more likely. CON would be employed partly for administrative reasons – such a mint could most conveniently be treated as an extension of that of Constantinople – and partly because the military headquarters where they were struck would not be permanently identified with any specific locality.

(2) *Justinian*

Undated decanummia having an I between two crosses and CON or COR as mint-mark [234]. These differ in style, fabric and lack of officina letter from the corresponding coins of Constantinople, while closely resembling in style and fabric the coins of Carthage, on which they are sometimes overstruck. They are commonly found in north Africa, and apparently not elsewhere. Bellinger attributes these also to a temporary mint in Constantine in Numidia, but a migratory military mint, using workmen from Carthage but employing CON – or COR as a compromise between CON and CAR – is more likely.

(3) *Justinian*

Half folles and decanummia dated Year 26 (= 552/3) and having the letter P beneath the mark of value [231–3]. A unique half follis of the same series [230] is dated IND (*ictione*) I, which corresponds to the same year. Wroth attributed the half folles to Antioch, regarding the P as a variant of the Antiochene abbreviation of *polis* (P), but the coins are purely Italian in style – they use A instead of A in *Anno* and V instead of V for 5 in the date – and Bellinger

attributed them to Perugia, on the assumption that a mint was briefly opened there at the close of the Gothic war. There is no other evidence, however, for the existence of such a mint, and if there had been one it would either have identified itself clearly or not used any mint-mark at all. The style of the decanummia, with profile bust, is closely related to that of coins of Ravenna [cf. 210 with 230], which would suggest that P is a Greek *rho* and stands for 'Ραβέννα [cf. RAB on 210]. But the half folles closely resemble anomalous coins of the same year having the mint-mark of Nicomedia (W. Pl. VII. 4), which would rather point to a dispersal of workmen from Italy at the end of the Gothic war. The coins with P are in fact best regarded as Constantinopolitan, with the P standing for *polis*.

#### (4) *Justin II*

There are several series of anomalous folles and half folles having on their obverse the seated figures of Justin and Sophia of a style very unlike that of the mint whose mark appears on the coins but which in some cases resembles that of the half folles of Rome [196]. The Rome-like coins are folles with the mint-marks of Nicomedia (*DOC* 1, Pl. LIV. 100b. 3) or Cyzicus [235] dated Year 10; the others are half folles with CON [237] or NI (*DOC* 1, Pl. LV. 110.1) dated Year 8. Bellinger attributed the half follis with CON to Constantine in Numidia, but while it cannot be from Constantinople – this is precluded by its style and by the presence on a half follis of a separate mint-mark – its appearance is eastern and two specimens are known to come from Asia Minor. No plausible explanation for any of the coins has yet been found, though the existence of abnormal issues of both Justin II and Maurice dated Year 10 suggests that some kind of anniversary minting may have been involved.

#### (5) *Tiberius II*

The anomalous coins of this emperor are folles which differ totally in appearance from those of the mints whose marks they bear. There are folles with CON of Years 2 (T. 28), 5 and 6, with NIKO of Years 7 and 8 (*DOC* 1, Pl. LXIII. 31a. 5), with KYZ of Year 7 [238], and of ΤΗΕΥΡ of Year 7 (BN). Though the busts are of rather different types, one having a large, rather long face and the other a small, rounded one, they are stylistically closely related and the fabric and general appearance of the coins suggests that all originated in the same mint. The 'large' face on one group resembles that of the half folles of Rome [cf. 197] and the general appearance of all the coins is Italian rather than eastern, but it is difficult to see Rome being required to strike folles on behalf of several mints in the East. Against the view that the coins are contemporary counterfeits is the fact of their being fairly common and known from a number of different dies. Their origin is a still unsolved problem.

#### (6) *Maurice*

Anomalous folles of Years 1 (*DOC* 1, Pl. LXVII. 21) and 2 [239] with mint-mark CON which do not resemble in style the ordinary issues of Constantinople and differ in such details as

the use of A instead of A for their officina letter and – in the case of coins of Year 1 – of an inscription beginning *Mauricius* instead of *Tiberius*, which is otherwise normal on coins of the first year of the reign. The coins are similar in a number of respects to the anomalous folles of Tiberius which have just been discussed, and their place of origin is equally unknown.

(7) *Maurice*

There are half folles of Year 10 which have a bust that is usually of 'Rome' style with CON [240], less obviously of 'Rome' style with KΘN [241], or of another anomalous style having mint-marks CON (*DOC* 1, 363/260.5) or KVZ [242]. In the last case, coins with different mint-marks share a common obverse die. Bellinger attributed some of the series to Constantine in Numidia, but none are African in either appearance or provenance. Possibly they are all contemporary imitations, though the number of specimens known is against such an hypothesis.

(8) *Maurice*

Half folles, decanummia and pentanummia [243–5] of distinctively Carthaginian style but not fitting into the pattern of Carthaginian issues for the reign. The half follis is dated Year 11 and the decanummium has the mint-mark CON, so that Bellinger attributed them to Constantine in Numidia. A military mint in Africa, as with the comparable issues of Justinian, is more likely.

## Pseudo-imperial coinages (Pl. 15)

A complication in dealing with Byzantine coinage of the fifth and sixth centuries is the simultaneous existence, during most of the time, of related coinages struck in provinces of the Empire that had been occupied by the Germanic invaders. Though in all of these except distant Britain there was a considerable pseudo-imperial coinage, the forms which this took varied greatly from one Germanic kingdom to another, the major differences being determined more by their economic circumstances than by their constitutional status. Broadly speaking, the gold coinage everywhere continued to be imperial in character, though in some places there was a tendency for old types to be continued after these had disappeared in the East, while others saw the immobilization of the name of the emperor whose coinage had formed the bulk of the circulating medium at the time when the region was occupied. The continued use of imperial names and types was due to the fact that coins bearing them had greater acceptability; only in the case of the Ostrogoths – perhaps also that of the Burgundians – did it imply a formal recognition of imperial authority. Silver and copper coins, where they existed, i.e. mainly in Italy and North Africa, exhibited a higher degree of independence, being for the most case either municipal or royal in character.

Since some of the Germanic coinages can easily be confused with imperial issues their chief characteristics must be summarized here.

#### ITALY AND PROVENCE:

##### ODOVACAR, 476–91, AND THE OSTROGOTHIC KINGDOM, 491–553

In 476 Odovacar, *magister militum* in Italy, deposed Romulus Augustulus on the ground that a separate line of emperors in the West was no longer necessary and made himself master of Italy. He and his Ostrogothic successors recognized the formal sovereignty of the emperors at Constantinople, though this allegiance naturally produced a rich harvest of complications in the later stages of the Gothic war.

The gold coinage of Italy under Odovacar continued to bear the name and effigy of Zeno, but the issues of Italian mints, which were more conservative than Byzantium, can only be separated from those of the East by their style or type or by the presence of specific mint-marks. The Ostrogoths struck their gold coins similarly in the names of Anastasius, Justin I and Justinian I; in the later stages of the Gothic war they seem to have reverted to the name of Anastasius. The solidi can be distinguished from those of Constantinople by their style and by the fact that the design of the bust and the type of the reverse were not brought up-to-date: the helmet always has the tails of the diadem visible, a feature which in the East disappeared under Anastasius, and the reverse type is almost always a profile Victory with a voided cross [246]. The officina letter, where one is present at all, is A. Semisses were not normally struck at all; one formerly in the Ponton d'Amécourt collection (*MIBI*, Pl. 36.2), with a Cupid supporting the shield on which the Victory is writing, is a ceremonial issue of a quite different type to that of Constantinople. Only tremisses are likely to cause difficulty, for they were of the same type in Italy and the East. Italian issues of the Ostrogothic period [258] are of higher relief than those struck in the East and in Italy after the Byzantine reconquest.

The silver coins struck under Odovacar are purely Italian in appearance and have either types appropriate to Rome or mint-marks (MD, RV) stating where they were struck [264]. The bulk of the Ostrogothic silver coinage bears the traditional SC (i.e. *Senatus Consultu*) of the Roman Senate or the monogram or name of an Ostrogothic ruler as well as the name of an emperor [266–8], though occasionally identification depends simply on style and fabric [265]. The later busts show the emperor wearing a robe of peculiar design decorated with pellets, quite different from the customary chlamys and not much resembling a loros. Its design was taken over by the subsequent silver coinage of Justinian and Justin II [56–61].

The copper coinage has occasioned some confusion. After 476 the Roman Senate, which enjoyed a kind of Indian summer of authority with the disappearance of the western line of emperors, reasserted its ancient prerogative of striking in bronze and issued folles in the name of Zeno with the mark SC. These were soon replaced by an *Invicta Roma* series of folles and half folles having the head of Roma and such reverse types as an eagle or a wolf and twins. Only the lower denominations were thus left free, and apart from Theodahad, who struck folles with his own name and bust, Odovacar and the Ostrogoths limited themselves to these. The coins

with the name of Justin or Justinian and the mark of value V [189, 191–2], which were attributed by Wroth to the Ostrogothic period, belong in fact to the later years of Justinian and to the reign of Justin II.

#### NORTH AFRICA: THE VANDAL KINGDOM, 439–534

The Vandals invaded North Africa in 429 and captured Carthage in 439. The kingdom lasted till 534, when Belisarius, having defeated Gelimer at the battles of Ad Decimum and Tricameron, accepted his surrender and sent him a prisoner to Constantinople.

It is not certain that the Vandals struck any gold. The coins attributed to them by Wroth are mainly Burgundian, and it seems likely that the quantities they captured by war and piracy were sufficient for their needs. Their earliest silver coinage consists of imitations of Honorius [269], easily recognizable by their style and fabric. They are struck on thick flans too small for the dies, like so many of the copper coins of Carthage, and often have 90° die position. Later there were fairly abundant issues of coins bearing the names of Vandal kings and marks of value [270]. The attribution of only two types is open to doubt. It was suggested by Courtois that the silver coins bearing the name of Honorius and dated Year 4 or Year 5 which are commonly attributed to Huneric were really struck during the revolt of Gildo the Moor, but their style and the fact of their being dated are in favour of the traditional attribution. Some coins bearing the name of *Iustinus* were attributed by Wroth to Hilderic and Justin I, but though we know that Hilderic's relations with Justin were friendly in character, it seems unlikely that he would have gone so far as to recognize him on his coins. Though the view is not without its difficulties, the coins can be attributed with more probability to Justin II.

The copper coinage of the Vandals consists of large units of 42-, 21- and 12-nummi pieces bearing the name or device of Carthage and presumably forming a municipal issue inspired by that of the Senate at Rome. The names or monograms of Vandal kings appear only on nummi. The status of a 4-nummus unit is ambiguous, for it has no inscription and it is not clear who the person represented on it is intended to be. Wroth's classification of a great mass of fifth- and sixth-century nummi as 'Vandalic' has misled many scholars. Some of the coins are regular late Roman issues struck in Italy and elsewhere; some belong to the period of Justinian; some represent local and probably unofficial issues in Egypt; and only a minority can be construed as Vandal at all. The rare sestertii and asses of the Principate which are found stamped with the numerals LXXXIII or XLII are obviously related to the Vandal monetary system, though the coins here came to light in Italy as well as in North Africa. The marks apparently date from the late fifth century.

#### NORTH-WESTERN SPAIN: THE SUEVIC KINGDOM, c. 420–585

Apart from a rare silver coin bearing the names of Honorius and King Rechiar only solidi and tremisses can be attributed to the Suevi. The solidi, which show a number of stylistic peculiarities, are all in the name of Honorius, and though the attribution has been questioned it

is borne out by the evidence of find spots. The tremisses, which are usually of poor quality gold, are almost without exception in the name of Valentinian III and are characterized by a very distinctive deformation of the wreath on the reverse [256]. In neither case is there any possibility of their confusion with Byzantine coins. Just before 585 the Suevi began to strike a more distinctly national coinage, bearing the names of mints, but before it had time to develop the kingdom was conquered and absorbed by the Visigoths.

#### SPAIN AND SOUTHERN GAUL: THE VISIGOTHIC KINGDOM, *c.* 455–713

Athaulf led the Visigoths from Italy into Gaul in 411, and in 417 they concluded a treaty with Rome which allowed them to settle in the region of Toulouse. Soon after the middle of the century they repudiated Roman suzerainty and under Euric (466–84) they rapidly built up a kingdom which stretched from the Loire to the Pillars of Hercules and included most of southern Gaul and Spain. All of Gaul except Narbonensis, however, was lost to the Franks as a result of Clovis' victory at Vouillé (507), and further Visigothic expansion was limited to the completion of the conquest of Spain at the expense of the Romano-provincials who still held much of the country, of the Suevi, who were eliminated by Leovigild in 585, and of the Byzantines, who took advantage of a disputed succession to seize a coastal strip in the south in 551 and were not finally dislodged until *c.* 625.

The Visigothic pseudo-imperial coinage began *c.* 450 and continued until *c.* 580, when it was abolished in favour of a 'national' coinage of very distinctive type and organization just before the end of the reign of Leovigild (*d.* 586). The earliest coins are imitations of solidi and tremisses of western emperors, but when the line of these came to an end the coins were continued in the names and effigies of the emperors at Constantinople. The characteristic type of the tremissis, that of a Victory advancing to the right and rapidly stylized into something which looks like a cross between a kangaroo and a grasshopper [254, 255], differs from the facing Victory of Ostrogothic and Byzantine coins and was probably introduced by Theodoric the Ostrogoth, when he became regent of Spain after 507, in order to distinguish the Visigothic issues from those of Italy. These tremisses are characterized by the presence of a large cross on the emperor's chest. The solidi in the sixth century [249] conform more or less to Byzantine types, but their style and fabric are quite distinct and there is no danger of confusion.

#### GAUL: THE FRANKISH KINGDOM, 481–751

The Franks had already begun to settle in small groups in the extreme north of Gaul in the fourth century, but the Frankish state was the creation of Clovis (481–511), who by the time of his death was master of all northern, western and southern Gaul, as well as of a substantial area of western and southern Germany. The Frankish kingdom continued to expand under his sons, who conquered the Burgundians (534), annexed Provence (536), and mastered for a time

much of north Italy. The Merovingian dynasty of which he was the effective founder lasted until 751, when it was replaced by that of the Carolingians.

The coinage of the Merovingian period falls into two phases. A pseudo-imperial coinage probably began in the mid-fifth century but cannot have been of any importance before the reign of Clovis. It lasted until *c.* 570, when it began to be displaced by a characteristic 'national' coinage bearing the names of moneyers and mints. There was at the same time a royal coinage, of which the most remarkable products were the *solidi* and *tremisses* struck by Theodebert I (534–48) after the invasion of north Italy. They gave great offence at Byzantium because they showed the king's own effigy replacing that of the emperor and accompanied by the full imperial style (DN THEODEBERTVS VICTOR). He and other kings of the early and mid-sixth century also struck a few silver and small copper coins, imitated for the most part from those of the Ostrogoths in Italy. There were also local issues of copper, notably at Marseilles.

The true pseudo-imperial coins of the Franks fall mainly into three classes. There are *solidi* of very rough work [248] imitated for the most part from Ostrogothic issues – the normal terminal letter of the reverse inscription is A – and often with a letter, the meaning of which is obscure, in the reverse field. There are *tremisses* bearing the name of Justin or Justinian, usually badly blundered, and having a crude facing Victory on the reverse. They were mainly struck in the eastern and northern parts of the Frankish kingdom, merging in the north into a still cruder coinage attributable to the Frisians [259]. Finally there are *tremisses* with a Victory advancing to the right, which are partly copied from those of the Visigoths, from which their earliest issues cannot be satisfactorily distinguished [253], and partly from those of the Burgundians. Related to the second group are *tremisses*, best attributed to the Alamanni, having a Victory with elaborate wings [260].

In the last decades of the sixth and the first few years of the seventh century there was also struck in Provence a very remarkable group of what are better termed quasi- than pseudo-imperial coins. They consist of *solidi* and *tremisses* bearing the names of Justin II – these are probably later than his reign – Maurice, Phocas and Heraclius. The names are correctly rendered and the coins are usually of good style, but the types, partly original and partly based on earlier ones, make no attempt to follow those of contemporary Byzantium. The coins are light in weight, the *solidi* [250] being marked XX or XXI (*i.e.* 20 or 21 carats) and the *tremisses* VII [257], these being apparently intended as approximations intelligible to the Gallo-Roman provincials of what are really coins of 60 grains (= 3.90 g) and 20 grains (= 1.30 g). They were struck mainly in Provence – the mints on the coins include Marseilles, Arles, Uzès and Viviers – and the issue came to an end with the annexation of the south by Chlotar II in 613. No generally accepted explanation has so far been found for this sudden return of the imperial name to a fairly extensive coinage in southern France precisely at a time when the national Frankish types were being generally developed elsewhere. It cannot be connected with the revolt of Gondevald, a Merovingian usurper who landed in Gaul with the support of the emperor Maurice in 583, for the chronology does not fit and there are no

coins of the localities (Avignon, Comminges) with which Gondovald was most closely associated. Perhaps the most likely suggestion is that the coins were connected with the very extensive Papal patrimony in Provence: this would explain both their formal recognition of imperial authority and their complete dissociation from the imperial coinage of the time. They must in any case be excluded from the true imperial series.

#### SOUTH-EASTERN GAUL: THE BURGUNDIAN KINGDOM, c. 440–534

After the great Germanic invasion of Gaul in 407 the Burgundians settled in the upper Rhineland, in the region of Worms, but their first kingdom was destroyed by Attila in 436 and the second Burgundian kingdom took root in the Jura and extended southwards almost to the Mediterranean. Early in the sixth century it began to break up; part of it was annexed by the Franks and Ostrogoths in 522–3 and the remainder by the sons of Clovis in 534.

The Burgundians, like the Ostrogoths, struck coins in all three metals. Their solidi are of good style and bear the name of Valentinian III, or later of Justin I or Justinian, but the models for these were Ostrogothic, not imperial. Most of the later ones bear the monogram of a Burgundian king in the field [247: GVB, i.e. Gundobad]. Some solidi of good style, with the name of Justin I and the reverse inscription ending in IS, but without monogram, have sometimes been confused with imperial issues, but they were really struck by the Burgundian king Sigismund; there were some twenty specimens, all from the same dies, in the Gourdon hoard. The Burgundian tremisses have a Victory advancing right and usually a royal monogram in the field [252: MAR, i.e. Gundomar]; some of those without a monogram [251] are among those attributed by Wroth to the Vandals. The later issues cannot be satisfactorily distinguished from those struck by the Franks in former Burgundian territory after 534.

#### ITALY: THE LOMBARD KINGDOM, 568–774

The Lombards invaded Italy in 568. The largest group settled down in the foothills of the Alps and the valley of the Po, where a Lombard kingdom came into existence with its capital at Pavia. Smaller groups set up the duchies of Spoleto in central Italy and Benevento in the south. Each of these continued to expand throughout the seventh century at the expense of those parts of the country still in Byzantine hands, the fortunes of the kingdom reaching their apogee with the occupation of Ravenna in 751. But the Lombard threat to Rome and the Papacy resulted in repeated Frankish invasions (754, 756, 773), and Charlemagne finally made himself king of the Lombards in 774.

The evolution of Lombard coinage followed the same pattern as that of Germanic coinages elsewhere, a pseudo-imperial phase being followed after an interval by the creation of a 'national' coinage, but there was a time-lag of about a century, since the Lombards entered the Empire so much later than the other peoples. Coins were struck both in the north and in the south; none have so far been satisfactorily attributed to the duchy of Spoleto. Nor



have any *solidi* been attributed to the kingdom, as distinct from those of the duchy of Benevento, though it is possible that some of the 'Ravennate' issues of Heraclius really belong to the Lombards in Tuscany. Tremisses were struck in abundance. They form two groups, one located in the valley of the Po, bearing the name of Maurice and having a Victory reverse [261], the other from Tuscany, having the name of Heraclius and a cross potent reverse [262, 263]. They are struck in high relief, with an enormous annular border exaggerated from that of the tremisses of Ravenna. The identification of the later pseudo-Maurician issues presents no difficulty – the coinage began in the late sixth century and lasted down to the creation of the national coinage by Cunincpert (688–700) in or soon after 690 – but the early issues cannot be satisfactorily separated from those of Ravenna. Wroth's presentation of the material is unsatisfactory, since he supposed the pseudo-Heraclian issues to be the successors of the pseudo-Maurician ones, instead of representing a quite distinct series originating in a different part of the country. There is also a quite abundant silver coinage, typically Ravennate in style but of very rough fabric, on which the names of late sixth- and early seventh-century emperors are reproduced in a very negligent fashion. They are generally assumed to be Lombard in origin, but no hard and fast line can be drawn between imperial issues and contemporary imitations.

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# THE HERACLIAN DYNASTY AND ITS SUCCESSORS, 610–717

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## General features

Byzantine history in the seventh century was one of repeated political disasters which the Empire eventually survived, though the state to which Leo III succeeded in 717 was very different from that of which Heraclius had become emperor in 610. The most startling changes were of a territorial character, more especially in the East. Already by 610 the rulers of Persia had begun a career of conquest unequalled since the days of Cyrus and Cambyses. In less than two decades of fighting they conquered Syria, Palestine and Egypt, and overran much of Asia Minor, so that in concert with Avar allies from Europe they were able in 626 to threaten Constantinople itself. These conquests were ephemeral, for Heraclius was able in the late 620s to achieve total victory over his foes and regain all that had been lost, but they prepared the way for the more permanent achievement of the Arabs.

The first incursion of Islamic forces into Palestine occurred in 634, two years after the Prophet's death. The battle of the Yarmuk (636) sealed the fate of Syria and Palestine, where Caesarea, the last Byzantine stronghold, surrendered in 639. Lower Egypt was conquered by 642, and though Upper Egypt was only subjected during the following decade it had ceased to have any connection with Byzantium. Asia Minor was persistently raided and twice, in the 680s and again in 716/17, the Arabs were able to besiege Constantinople itself. In Africa Tripolis and even Tunisia were subjected to destructive raids from the 640s onwards, though the conquest of North Africa was not completed until the 690s; Carthage, momentarily captured in 695, was finally taken in 698. Nor were Byzantine losses confined to Asia and

Africa. Justinian's conquests in Spain were lost in the mid-620s. The various Lombard states in Italy enlarged their territories at Byzantine expense throughout the seventh century. The Balkans were overrun by Slavonic peoples, so that even in the south only towns like Thessalonica and Athens, greatly diminished in size and importance, remained as Byzantine islands in a predominantly Slavonic countryside. In the north-eastern Balkans the Bulgarian khans created a powerful state whose rulers nourished the ambition of conquering Constantinople and acquiring the imperial title. What remained of the Empire, Greek in speech and Orthodox in faith, was socially and economically shattered, though its military reorganization in the late seventh century saved it from final disaster and made possible its revival under the Isaurian dynasty.

These political disasters had naturally a profound effect upon the coinage, most obviously, and at first sight most surprisingly, upon the copper. The number of mints contracted sharply. Antioch, in imminent danger of Persian attack, was closed on the accession of Heraclius, and despite recent arguments to the contrary, it is scarcely possible to regard the rare Heraclian folles of the 610s and 620s with blundered Antiochene mint-marks as products of an official mint (see p. 106). In any case, it lay in territory which in the 630s was lost to the Arabs. Alexandria and Carthage likewise fell in turn to the latter. Thessalonica, Nicomedia and Cyzicus were closed during the reign of Heraclius, apparently in connection with a general reorganization of the central financial bureaux. Though coins were at various times struck at such places as Seleucia in Isauria, Isaura itself, and Constantia in Cyprus, these mints were only temporary in character and ceased to function with the end of the emergencies that had called them into existence.

This contraction in the number of mints cannot be entirely explained as a consequence of territorial losses, since it seems to have been accompanied by a decrease in the demand for coin. Certainly the coinage both contracted in volume and declined in weight. Even if we may tend to exaggerate the falling-off of the total quantity in circulation – the coins are of such slovenly fabric that they have been little sought-after by collectors, and the excavation material is based mainly on town sites and may not be typical of the countryside as a whole – there can be little doubt that Byzantine society in the seventh century was less differently organized from that of the Germanic states in western Europe than we have been apt to think. Though it never fell so far – the barbarian West for a time had no fractional coinage at all – much of its economic life was concentrated in villages and in the great centre of Constantinople itself.

The western half of the Empire seems to have suffered comparatively less, and one of the most striking features of the second half of the seventh century is the abundance and variety of the copper coinage of Sicily. This was matched by a very considerable output of gold, which seems to have been almost comparable in importance with that of the capital. One of the paradoxes of Byzantine coinage in the seventh century, indeed, is the fact that its gold coinage never suffered in the same way as did its copper. Solidi and fractional gold were struck in vast quantities, and, save at the end of the period in the West, remained of high

weight and fineness. The East had also, for a period of some sixty-five years (615–c. 680), an abundant coinage of silver, a notable change from sixth-century conditions. Though the general economic picture implied by these currency changes can be understood, the details are in most cases matters for speculation.

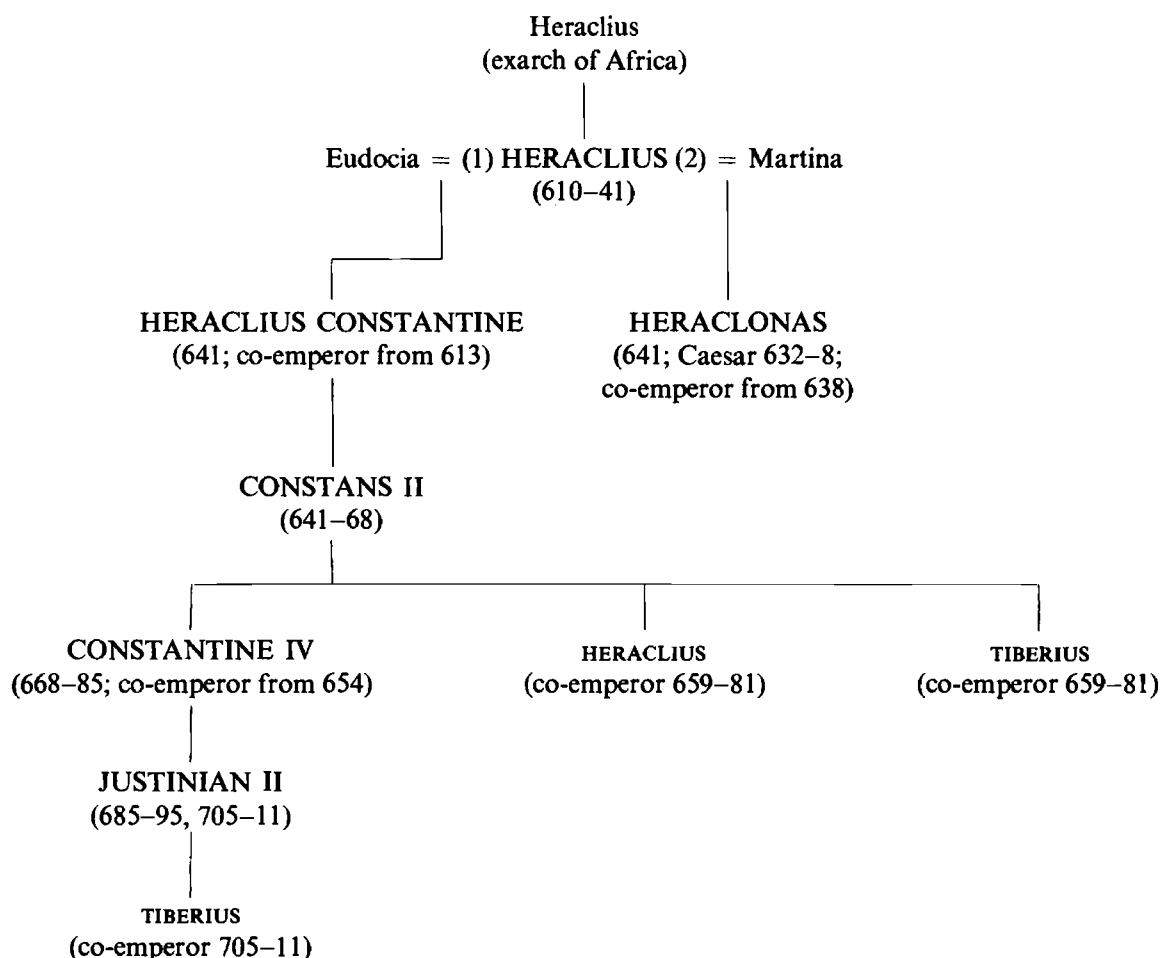
Eleven emperors ruled between 610 and 717, usually in association with one or more colleagues. Though the sequence and general chronology are clear enough, our authorities do not always agree on specific dates and there are a number of details, in general of no great importance to numismatists, which remain unsettled.

Heraclius	610–41	(alone 610–13, with Heraclius Constantine from 613, Martina from 616, and Heraclonas [Caesar 632] from 638)
Heraclius Constantine	641	(with Heraclonas)
Heraclonas (Constantine)	641	(with Constans II September–October)
Constans II	641–68	(alone 641–54, with Constantine IV from 654 and Heraclius and Tiberius from 659)
Mezezius, usurper in Sicily	668–9	
Constantine IV Pogonatus	668–85	(with Heraclius and Tiberius 668–81, thereafter alone)
Justinian II, first reign	685–95	
Leontius	695–8	
Tiberius III (Apsimar)	698–705	
Justinian II again	705–11	(alone 705, with his son Tiberius 705–11)
Philippicus (Bardanes)	711–13	
Anastasius II (Artemius)	713–15	
Theodosius III	715–17	

From 610 to 705 they were, with two exceptions, members of the Heraclian house, as can be seen from Table 3.

Coins are known of all the emperors, and of most of the combinations of emperors, in this list. There are also, exceptionally, coins of the attempted usurper Mezezius. Leontius, who reigned for three years, was long regarded as an inexplicable gap in the imperial series, his coins having been wrongly assigned to Leo III. The reason for this was that on the coins he is regularly styled *Leon* and not *Leontius*, as he is named by Theophanes and other Greek historical sources, but Italian writers call him *Leon* and in any case his coinage is quite distinct from that of Leo III in type and portraiture. The three and six months' reigns of Heraclius Constantine and Heraclonas, both in 641, have traditionally been regarded as two further gaps, but there exist solidi with a helmeted beardless bust and a *Constantinus* inscription which can be confidently attributed to Heraclius Constantine, and in the second volume of the Dumbarton Oaks catalogue it was argued that a whole series of coins usually given to Constans II should be transferred to Heraclonas.

Table 3 The house of Heraclius



The attribution of the solidi with helmeted bust requires no discussion, for they can be very closely dated and do not fit into the pattern of Constans II's coinage. It is true that the emperor's name appears simply as *Constantinus*, without a preliminary *Heraclius*, and that his half-brother Heraclonas is absent, but an emperor could please himself over his precise style and was under no obligation to include a colleague, especially when, as in this case, he probably hoped to eliminate him in favour of his own son. The argument in favour of the attribution of coins to Heraclonas was that he also was named Constantine – this is the only name used on the coins – and that Constans II seemed almost consistently to have had a standing figure and *En touto nika* inscription on his Constantinopolitan folles of Years 1–15 inclusive. But there exist folles with a *Constantinus* inscription and a facing bust which are dated Year 3 and are commonly overstruck on coins of the last years of Heraclius' reign, and the argument was that these, together with a fairly considerable group of solidi, hexagrams

and folles of related types, should be ascribed to Heraclonas, who was crowned Augustus in 638. This reasoning, so far as the coins dated Year 3 is concerned, must be abandoned, for specimens have been found overstruck on earlier coins of Constans II (see note to p. 111), but there remain some 'small bust' solidi, hexagrams and dodecanummia of Alexandria which are quite different from the early coins of Constans II, and while they may be of Heraclius Constantine, they are better left to Heraclonas.

The only empress whose effigy appears on the coins is Martina, niece and second wife of Heraclius, whose marriage to her was bitterly condemned by the public opinion of the day. She was created Augusta at the time of her marriage in 614, and Heraclius placed her bust or standing figure on his copper coins, through never on his gold or silver, between 616 and 629. No doubt, as with Sophia under Justin II, this honour was largely a tribute to her personality, although as the mother of an heir to the throne she had as good a title to it as any of her predecessors. But the intense hatred she aroused resulted in her elimination from the coinage in 629 and her failure to reappear on it in 641, despite the special role assigned to her by Heraclius in his will.

The regnal years of an emperor were reckoned in the customary fashion from the date at which he received the title of Augustus, not from that at which he attained effective power on the death of his predecessor, who would normally be his father. Since emperors often assumed the consular title on the first day of the year following their real succession, there existed a second system of what was technically called 'post-consular' dating corresponding to what we would regard as the regnal years. The internal chronology of the reigns of the Heraclian rulers is very complicated, however, and since it affected the coinage its main elements must be summarized here.

*Heraclius.* Crowned 5 October 610. He was consul in 611, but only assumed office on 14 January and contented himself with publishing the fact, dispensing with the customary consular procession. No consular coins of this year are known, and probably none were struck. Our sources do not agree as to the date of his death. It is usually given as 22 February 641 but was more probably 11 January.

He is at various times associated on the coinage with his second wife Martina, his eldest son Heraclius Constantine (by his first wife Eudocia), and his second surviving son Heraclonas (by Martina).

*Heraclius Constantine*, 'Heraclius called the New Constantine'. Born 3 May 612; crowned by his father and acclaimed as Augustus 22 January 613. Consul 1 January 632.

*Heraclonas* or *Heracleonas* (diminutive of Heraclius), also called Constantine. Born in the winter of 625/6. Created Caesar 1 January 632; crowned Augustus 4 July 638, but not publicly acclaimed as such until the consular celebrations of 4 January 639.

*Heraclius Constantine.* His dates are usually given as 22 February – 24 May 641, but are more probably 11 January – 20 April.

*Heraclonas (Constantine)*. Officially in power between his brother's death (20 April) and his own deposition, which can probably be dated to October.

*Constans II*. Born 7 November 630. Created Augustus by Heraclonas 'at the time of the vintage', presumably September 641. Became sole ruler after the deposition of Heraclonas. Assumed the consulship in January 642. Murdered at Syracuse on 15 July 668.

He associated with him on the throne his three sons, first Constantine IV (654, probably 13 April) and later Heraclius and Tiberius as well (659, probably 2 June).

He is always called *Constantinus* on his coins, but most historians follow the example of Byzantine writers in calling him Constans. Since a son of Constantine the Great also bore this name he is consequently termed Constans II. To call him Constantine III, even if more correct, is confusing, since historians are accustomed to give this numbering to the fifth-century usurper Constantine III (407–11), who was never recognized in the East.

*Constantine IV*. Succeeded his father in effect from September 668, when the news of Constans' death reached Constantinople and he was formally acclaimed. For thirteen years he accepted the association of his brothers Heraclius and Tiberius as co-Augusti, but in 681, after the birth of his son Justinian, he deprived them of their rank and relegated them to a monastery. He died on 10 July 685. This Constantine, who is always known as Constantine IV, is called Pogonatus, 'the Bearded', by Byzantine chroniclers from the ninth century onwards, but this was due to a confusion between himself and his father, to whom the nickname had been originally applied and whose beard, as one can see from his coins, was of gigantic dimensions.

*Later emperors*. The precise dates are in most cases uncertain, but the details are not important for the coinage. The folles and half folles of Justinian II's second reign start with Year 20, so that his restoration must have taken place in the early summer of 705 and not in September as is usually stated. Several emperors changed their names on their accession: Apsimar to Tiberius (III), Bardanes (Vardan) to Philippicus, Artemius to Anastasius (II), and possibly Leontius to Leo.

The correct attribution of most of the coinage presents few difficulties but there are some ambiguities arising out of the fact that both Constans II and Constantine IV, and apparently Heraclius Constantine and Heraclonas also, were simply called *Constantinus*. The chief denominations of Constans II and Constantine IV, especially when they include associations with other rulers, raise no problems, but the fractional coinage has often been misattributed, more especially since Tiberius II was also called *Constantinus* and this name is sometimes used without *Tiberius* on his subsidiary coins. There is a good deal of anonymous coinage and some repetition of types, mainly between Constans II and Heraclius. The old confusion of Leontius and Leo III has been referred to already, and until recently part of the coinage of Justinian II's second reign was attributed to his first one, it not having been

realized that he ruled alone for a short time in 705 before associating his son Tiberius with him as Augustus.

The changes in values which must have accompanied the changes in the copper coinage are virtually unknown. The decline in weight of the follis during the reign of Heraclius presumably meant inflation of the solidus in terms of the follis and consequently of the nummus, if indeed this unit of reckoning was still used at all. Heraclius attempted a monetary reform in 629, after his victorious return from the Persian War. The weight of the follis was almost doubled and fractions were struck on a considerable scale, but since these included a 30-nummus piece but omitted the pentanummium it is clear that a complete return to the coinage of the previous century was not envisaged. The new, heavier coinage in any case lasted for little more than a year; by the mid 630s the weight standard had fallen back to a level below even what it had been before the reform took place. Constans II's folles are all of the same low standard. Constantine IV reintroduced a heavy coinage of copper, with folles almost as large as the heaviest of Justinian I and with a whole series of fractions down to the pentanummium. They seem to have lasted during his reign; at least we have several separate issues for his early years and another of the same standard dated Years 30 and 31. The fact that the early half folles have the mark of value K accompanied by a small M and the decanummia have the I accompanied by a small K suggests that his new coins were intended to be reckoned at twice the value of those current before the reform, though even this would have involved a considerable over-valuation of those of Constans II. Some of Justinian II's coins are also respectable in size, though not so large as those of Constantine IV, but in general the copper of the later part of the century is of about the same weight as that of Constans II and little better in execution.

The design of the coins, apart from Justinian's introduction of the effigy of Christ on his gold and silver, followed much the same general pattern as that which had obtained in the preceding century. The main novelty arises from the introduction of portraiture under Phocas, since the combination of this with Heraclius' success in founding a dynasty meant that several emperors, coming to the throne in childhood and in due course associating their own sons as colleagues, are represented in several different ways on the coins. This contrasts with the practice of the sixth century, when each emperor was fully adult at his accession and the same effigy normally served throughout his reign. How far the imperial representations can be regarded as portraits, as distinct from rough attempts at characterization, is not entirely clear, for the coins which are artistically most successful – the last issues of Constantine IV and those of Justinian II as a child [295, 296] – are not those in which the element of portraiture bulks very large. Although they are very crudely rendered, the long beard and moustache of Heraclius after 629 [275] are undoubtedly intended to represent his personal appearance. We are told by a Byzantine chronicler that in his youth he had had a long beard but that he cut it short at his accession – this explains the short-bearded bust of the coinage of 610–29 [271] – but he evidently reverted to it later. The feature was hereditary, and the gigantic beard of the coins of Constans II from 651 onwards [283–7] explains his



nickname Pogonatus. Later emperors usually have a short beard, and the effigy of Leontius [299], a burly man with a short neck and a round bearded face, is as easily recognizable as that of Phocas.

Another change from the preceding century is that standing effigies, after having been introduced on the copper under Phocas, now invade the gold on a considerable scale. Seated figures are virtually limited to the hexagrams of Heraclius [330–2], and were evidently intended as a mark of differentiation from the types of the gold and copper, which in 615 were two busts [272] and two standing figures [353] respectively. Military types are common on the copper, but on the solidus the cuirass with shield or paludamentum is virtually displaced by the chlamys, the costume of the court and civilian life, not of the battlefield. Consular types are not used in the East between 610 and 692, and when Justinian II reintroduced the loros on his standing figure [298] it had become a long, richly embroidered scarf, no longer the border of a full consular cloak. Leontius continued it on coins having as type an imperial bust [299], and thereafter it became a regular alternative to the chlamys.

The multiplication of effigies on the coins of Heraclius, Constans II and Constantine IV naturally led to much attention to protocol, which is always strictly observed. Where there are two figures, the senior is on the spectator's left, the junior on his right; where there are three the senior is in the middle, the next senior on the right and the most junior on the left. This difference in seniority is often reinforced by differences in size. Heraclius Constantine, Heraclonas and Tiberius (son of Constans II) are all shown at first very small, and Heraclonas as Caesar is uncrowned. Less care was sometimes taken over the copper than the gold. On the latest solidi of Constans II [287] the figures of his three sons are carefully graded in size, while on the contemporary follis [376] Constantine IV is only a little larger than the others, who are themselves almost equal in height.

The chief symbol of empire, apart from the crown and the chlamys fastened by a fibula with three pendants, was a globus cruciger, sometimes accompanied by a cross-sceptre. From Justinian II onwards the emperor often holds an akakia, which bears the same relationship to the mappa as the loros does to the old consular robes. The crown reaches a high degree of elaboration on the solidi of the middle years of Heraclius' reign, but on later coins it becomes again a simple diadem, shown as two rows of pellets having a cross, or a circular ornament surmounted by a cross, in front. The helmet is occasionally used as an alternative to the crown.

The traditional title and inscription lasted for most of the seventh century but then began to break down. The first coinage of Justinian II, struck when he was still very young, does not accord him the traditional prefix of DN, and subsequent rulers seem to have treated its use with indifference. Justinian II introduced the formula *multos annos*, a common acclamation at imperial receptions and processions, instead of *perpetuus augustus*; it was dropped by Leontius but revived again by Tiberius III, and eventually displaced the old form. The titles remain consistently Latin; although Heraclius began to be called *basileus* in official documents after 629, neither this nor *despotes* ever appears on coins during the seventh century.

The earliest Greek inscription on a coin is the *En touto nika* on folles of 641, but not much significance can be attached to the use of a tag which was almost the equivalent of a liturgical formula.

The copper coinage continued in large measure to be dated and to bear indications of mint and officina, though in practice the execution of the coins is so slovenly that these are often illegible. The practice of overstriking the copper was universal; new flans seem to have been prepared only rarely, and many coins were simply struck on cut-down specimens of older ones. Folles of Justinian II are often struck on quartered folles of Constantine IV, and folles of other emperors have been found overstruck on much older coins of the period of the Tetrarchy. The illegibility of some coin series is increased by the practice of countermarking, which makes almost its sole appearance in Byzantine coinage in the seventh century. It was probably connected with the general debasement of the copper and is characteristic of certain relatively isolated currency areas – Sicily, Cyprus, Cherson – where changes in value did not reflect closely those of the central provinces or which found themselves in difficulties over the supply of coin.

### Eastern mints: gold coinage (Pls 16–18)

The gold coinage of the period 610–717 consists almost exclusively of the same three denominations as in the previous century, the solidus, semissis and tremissis. There were occasional issues of half tremisses, and in the early eighth century of quarter solidi. Gold medallions were no longer struck, the nearest approach to them being two  $2\frac{1}{2}$  solidus multiples, struck with solidus dies, in the Pereshchepino hoard. The use of light-weight solidi, begun under Justinian I, continued down to the first reign of Justinian II. The eastern coinage remained in general of good weight and fineness, but from the late seventh century onwards the quality of western issues left much to be desired.

Eastern gold coins, with the exception of a small group of Constans II's solidi of Classes I and II, bear no indication of when they were struck, but the solidi can normally be dated with the help of the folles. A notable feature of the solidi, and in the West of semisses and tremisses also, is the proliferation of letters or symbols on the reverse, either in the field or after CONOB or at the end of the inscription. Some of these mark the solidus as being light in weight, Heraclius' last issue has an imperial monogram in the field to compensate for the absence of an imperial inscription on the obverse, and under Constans II there is a sequence which indicates regnal years, but in most cases the meaning of these letters or symbols is unknown. Die links between such coins and normal solidi show that they do not, at least in most instances, imply separate mints, and the theory that they identified cases of one mint working on behalf of another is implausible.

## SOLIDI OF NORMAL WEIGHT

*Heraclius, 610–41*

There are four main classes of solidi of Heraclius, which can be dated respectively 610–13, 613–29, 629–31 and 632–41. Within these classes some further chronological breakdown is possible. There is much variety in detail, mainly in the style of the busts in Classes I and II and in the letters or symbols in the field. One rare group of solidi falls outside the main classification, since it combines the name of Heraclius with the portrait of Phocas and uses the customary reverse type of the latter, a facing angel [314]. Several specimens have been found in Egypt, and it is best attributed to the very beginning of the reign and to the mint of Alexandria, though Hahn would prefer Cyprus. The reverse inscriptions end III, the I probably being that of the coin used as a model and the II for πόλις, Alexandria being ‘the Great City’, in contrast to Constantinople, ‘the Royal City’, in Egyptian records of the time.

In addition to the eastern solidi of Constantinopolitan style there are others whose mints are uncertain. Some of Class II, with III [315], IX or I at the end of the reverse inscription, were classified in *DOC* as Alexandrian, but Hahn would prefer to attribute them to a military mint during Heraclius’ eastern campaigns. Jerusalem is also a possibility. Another group of Classes I and II [316] have busts resembling those of the standing figures on Thessalonican folles, and probably belong to this mint. Others again [312, 313] have annular borders like those of Ravennate coins; they have also been attributed to Thessalonica, but more likely belong to some unidentified mint in the Balkans or the West. Solidi of the later years of Heraclius and of Constans II with an X after CONOB have been doubtfully attributed to Cherson. The classes of normal solidi are as follows.

I. 610–13. Heraclius alone, with helmeted bust wearing paludamentum and holding a globus cruciger [271]. There are two groups, an early and very rare one having PER in the inscription – this carries over from Phocas’ reign – and a common one with PP. The reverse type, a cross potent on steps, marks a return to that of Tiberius II which had already been used on the solidi of the Interregnum, but Phocas’ replacement of AVCC by AVS4 is retained. The only letter sometimes found in the reverse field is N, occasionally varied into what looks like a monogram of NAL. As with the later coinage of Phocas almost all specimens have either € or I as officina letter. Despite its brief period of issue these coins are very common, for many hoards date from the years of the Persian invasions of Asia Minor and the Slav raids on Greece.

II. 613–29. Heraclius and Heraclius Constantine, the obverse type consisting of two facing busts, each wearing a crown and chlamys. There are three groups: IIa, bust of Heraclius Constantine small, the crowns elaborate (flat) and surmounted by a cross [272]; IIb, bust of Heraclius Constantine still small, but crown simple (slightly convex) and the cross on a circlet [273]; and IIc, like IIb, but bust of Heraclius Constantine large

[274]. The three groups can be roughly dated to 613–c. 616, c. 616–c. 625, and c. 625–9. Letters found in the field are N (IIa, IIb), I, T or Θ (IIb, IIc), and K (IIC); K or B also sometimes occur at the end of the reverse inscription in IIC.

III. 629–31. Heraclius and Heraclius Constantine, Heraclius with a long bushy beard and moustache [275]. There are few varieties: an I or K in the reverse field, a B or T after the reverse inscription, a T beneath CONOB. It has sometimes been suggested that Heraclius' huge beard was intended to symbolize his Persian victory, since a beard and elaborate coiffure were traditional Persian symbols of royalty and are very prominent on Sassanian coins, but it is more likely that he had let his beard grow on the campaign and preferred it that way.

IV. 632–41. Heraclius, Heraclius Constantine and Heraclonas, the obverse type consisting of the standing figures of the three co-emperors and a monogram of Heraclius (Ϡ) being always present in the reverse field. There are two clearly marked groups.

IVa. 632–38. Heraclonas as Caesar is uncrowned and initially very much smaller than his brother – later he is almost the same size – and to balance the design there is a cross in the upper left field. The earliest variety [276] has the Heraclian monogram to the right of the cross; others have the monogram to the left and a Θ or I [277] in field right. CONOB is sometimes followed by a cross.

IVb. 638–41. Heraclonas as Augustus is crowned and not much smaller than his brother. The Heraclian monogram is always to the left. Sometimes there is nothing to the right but there may be a variety of letters: I, Λ or Α (i.e. IA in monogram), B (i.e. IB in monogram), C or K. The CONOB may be followed by a cross or a Λ.

The meaning of these various sigla has not been satisfactorily explained. The sequence Θ, I, IA and IB look like the numerals 9, 10, 11 and 12, and could be conceived of as indictional dates for 635/6, 636/7, 637/8 and 638/9. But this would date Heraclonas' coronation as Augustus in 636/7, while there is unimpeachable documentary evidence that it occurred on 4 July 638.

#### *Heraclius Constantine and Heraclonas, 641*

The solidi which can best be attributed to these two short reigns have as obverse types a facing bust with small head, in one case wearing a helmet [278] and in the other a crown [279]. They can be very closely dated, since on coins of both types the CONOB is sometimes followed by K, a continuation of the K in the field which occurs only in Class IVb of Heraclius. Since they both have a simple *Constantinus* in the inscription they have customarily been attributed to Constans II, but they do not fit into the well-marked pattern of this emperor's coinage and their Carthage counterpart (see pp. 123–4), as Mme Morrisson has noted, is dated to the fourteenth indiction, which ended on 30 August 641 and therefore precludes their attribution to Constans II. It is of course possible that both types belong to Heraclius Constantine.

*Constans II, 641–68*

The solidi of Constans II are as common as those of Heraclius. They form seven classes, diversified by the changes in the representation of the emperor himself and the number of his sons associated with him. The designs are usually well executed, and despite the rather grotesque appearance assumed by the emperor's immense beard and moustache in the second half of his reign some of them are amongst the handsomest of the whole imperial series. The inscription in the early issues is neat and correct, but in the late 650s there is a sudden deterioration, the emperor's name being represented only by a few minute letters, and on the last issue the imperial inscription is omitted entirely.

I. 641–7. Constans II alone, with beardless bust [280] or with a beard added as an afterthought to the die [281]. Varieties have an € or an S in the field or a C, S, or + after CONOB. The dies of coins with € or S in the field were originally beardless, but on all those with € and some of those with S the beard has been added as a row of small pellets made with a punch round the outline of the face. The € and S stand for Regnal Year 5 (= 645/6) and 6 (= 646/7). Probably the letters € and S were also additions, a single mint directive covering both the dating of the coins and the replacement of a beardless bust with a bearded one.

II. 647–51. Constans II alone, wearing a short beard. This class continues the previous one, with dated coins, having S [282], Z (= 647/8), and H (= 648/9) in the field, all with a beard made with short strokes at the time of the initial cutting of the die. After Year 8 dating was abandoned and the remaining coins of the class have no letter in the field. CONOB is sometimes followed by an S, +, or I.

III. 651–4. Constans II alone, wearing a long beard [283]. Two notable variants found only in this class are light-weight solidi of 23 carats having either a very large star in the reverse field or BOΓK in the exergue [319, 320]. The CONOB is sometimes followed by an I or a cross.

IV. 654–9. Constans II and Constantine IV, the former with a long beard and the latter small and beardless [284]. This type is a revival of that used by Heraclius and Heraclius Constantine. Despite its five years of issue the only variants are an I or a cross after CONOB.

V. 659–c. 661. Constans II, Constantine IV, Heraclius and Tiberius, with Constans II wearing a helmet instead of a crown and the customary cross potent on steps replaced by a cross (not potent) on a globus flanked by the standing figures of Heraclius and Tiberius [285].

The three classes on which Constans II's two younger sons appear cannot be dated precisely, and it is possible that Classes V and VI were really the other way round. Neither a comparison with the folles nor an analysis of the Asclepeion hoard are of much help. The variety of sigla found in Class VI might be thought to make it the earliest of the three, but this is outweighed by the fact that in Class V the inscription is less

fragmentary than is the case with Class VI. The elimination of the customary steps of the cross was due to the introduction of the two standing figures, since the globus which replaced the cross took less room. The coins are relatively rare, and the only variety is one having a cross after the reverse inscription.

VI. c. 661–c. 663. The same four emperors, but the cross potent on steps is restored, the steps being much narrower than before [286]. There are several varieties, with +, C, T, or Θ after CONOB or +, S, or Θ at the end of the reverse inscription.

VII. c. 663–8. The same four emperors, but with a drastic change of type probably influenced by that of the follis. The obverse has a helmeted bust of Constans II with long beard holding a globus cruciger, accompanied by the customary *reverse* inscription VICTORIA AVGꝰ followed by an officina letter. On the reverse there are the three standing figures of Tiberius (very small), Constantine IV (large) and Heraclius (medium) above CONOB. There are two main varieties: VIIa, with cross on helmet of Constans II; and VIIb, without cross on the helmet [287]. In either case the inscription is sometimes followed by a cross.

This type, which must have been struck at Constantinople while Constans was absent in the West, marks a very considerable breach with tradition. The most striking novelties are the omission of any imperial name or monogram, the omission of the traditional cross potent on steps, and the separation of the elements in the customary reverse inscriptions, since the inscription proper (with officina letter) is moved to the obverse of the coin while CONOB remains on the reverse. It is almost as if the government at Constantinople wished deliberately to create an ambiguity as to who was truly emperor, Constans II or his eldest son Constantine IV and his colleagues.

#### *Constantine IV, 661–8*

The solidi of Constantine IV are of four classes. On the first three, Constantine is shown in association with his brothers Heraclius and Tiberius, whose standing figures appear on either side of the customary cross potent of the reverse type; on the fourth class Constantine rules alone and the supporting figures disappear.

The first three classes are differentiated from one another by the details of the imperial bust. Class I, which is extremely rare and can have been struck for only a few weeks at the end of 668, is the only one to have a bust wearing a crown and chlamys and holding a globus cruciger [291]. The type is derived from that of Constans II's first coinage, but the die-sinker, by a curious error, started by using the formula ὈΝCONST ANIVSCCOI (or variant), i.e. 'Constantine and Constantine', in the inscription. Classes II–IV have all an helmeted and armoured bust, like that of fifth- and early sixth-century solidi, with a spear across the emperor's shoulder. On Class II, which can be dated 668–73 and which shows considerable variation in the details of the design, the ties of the diadem around the helmet are not shown and there is no shield [292, 293]. On Class III, which can be dated 674–81, the ties are shown

and the emperor has a shield; the style is very rough and the inscription is reduced to a few disjointed fragments, e.g.  $\Theta NC \tau NVSP$  [294]. Finally, on Class IV, which is mainly characterized by the absence of Constantine's brothers, the bust has been carefully re-designed by a die-sinker of great ability and taste; his coins are amongst the most beautiful in the Byzantine series [295]. Unfortunately his literacy was not on a par with his artistic skill, and though a full inscription was restored it spells the emperor's name *Constanus* and has some of the letters reversed or on their sides.

Solidi of Constantine are common, apart from those of the ephemeral Class I, and prove that the difficulties of the Empire were not the result of any shortage of precious metal. There are fewer sigla found on the coins than during the previous two reigns: a + or a  $\Theta$  after the reverse inscription on solidi of Class I, a + on those of Class II, and an  $\Lambda$  (i.e. A) after CONOB on those of Class IV.

### *Justinian II, first reign, 685–95*

The solidi of Justinian II's first reign form three classes. The first two are traditional in character, but the third marks a major innovation in the history of Byzantine coinage. Up to its issue the most important element in the design of the coins had been the bust of the emperor, occupying the place of honour on the obverse, and the only religious symbols in use on any recent denomination of gold had been the cross, the profile Victory and the facing angel. Justinian's third coinage saw the replacement of the imperial effigy by that of Christ on the obverse of the coins, the emperor transferring himself to the reverse. Though this arrangement was not continued by Justinian's immediate successors it had a profound influence on the future, setting the precedent for the use as coin types of representations of Christ, the Virgin and the saints and determining their position of precedence in relation to the emperor.

Classes I [296] and II [297] differ formally from one another only in having as obverse types a beardless and a bearded bust respectively, but there are other small divergences. On Class I the emperor's name is not preceded by  $\Theta$  or  $\Theta N$  and his hair is symmetrically arranged, while on Class II a  $\delta$  is present and the hair curls downwards on the left and upwards on the right. On the earliest coins of Class I the emperor's head is sometimes very small and beautifully designed, with careful attention to the contours and the requirements of three-dimensional portraiture, particular attention being taken over the representation of the eyes. Some specimens of Class I have an added beard, like that on Constans II's solidi of Years 5 and 6, formed by a row of pellets round the edge of the face. On Class I an A sometimes occurs at the end of the reverse inscription, on Class II a  $\Gamma$  – apparently a misunderstood  $\Lambda$  – after CONOB.

It is Class III [298] that marks a complete break with tradition. The obverse shows a facing bust of Christ, with long hair and beard and a cross (no nimbus) behind the head. It has been plausibly conjectured that the type is that of the standing figure of Christ in the Chalkê, at the

entrance to the Imperial Palace, and that the face goes back ultimately to the Olympian Zeus of Pheidias, the most sublime expression of the Greek ideal of Godhead. The reverse type is the standing figure of the emperor wearing a loros and holding in his right hand a cross potent on steps, the traditional mark of value on the solidus. The loros was by this time a long jewelled scarf, derived from the elaborate border of the old consular robe, which with the disappearance of the consular office had come to be that specially used by the emperor – though not by him only – in the Easter procession, partly because of its association with a festal occasion and partly because of a far-fetched parallel between it and the winding-sheet of Christ. It was therefore a costume peculiarly fitting for the emperor to wear when in the presence of Christ on the other face of the coin. The obverse and reverse inscriptions, with Christ described as *Rex Regnantium* and the emperor as *Servus Christi*, underlined the mutual relationship of the heavenly and earthly sovereigns which the coin depicted. The issue cannot be dated with certainty, but it seems natural to relate it to Canon 83 of the Quinsextine Council of 692 which prohibited representations of Christ in the form of a Paschal Lamb and laid down that he should henceforward be shown in human form. The issue of the new coin type is scarcely likely to have been a consequence of the promulgation of this Canon, as some scholars have supposed; more probably it was the striking of the coin that caused discussion of the matter and led to the formulation of the canon.

*Justinian II's successors, 695–717*

The solidi of the period 695–717 present fewer problems and can be dealt with briefly. With the exception of those of Justinian II's second reign they are all of traditional design with imperial bust on the obverse and cross potent on steps on the reverse, and there is only a single type for each emperor.

The solidi of Leontius [299] have a certain element of portraiture about them, the emperor being shown as a heavy burly figure, bearded, wearing the loros and holding an akakia and a globus cruciger. They were assigned to Leo III in all the older manuals, but their ascription to Leontius is certain. The akakia held by the emperor is usually described as a mappa, since it is held in the customary manner for starting the consular games, but instead of being a loose roll of cloth it is now a short cylinder with jewelled ends. Some coins have an A following the officina letter at the end of the reverse inscription.

Tiberius III revived the armoured bust type with shield, but he wears a crown instead of a helmet and holds a spear transversely in front of his body instead of across his shoulder [300]. The type was not entirely without precedent, though one has to go back to solidi of Majorian (457–61) or to the great gold medallion of Justinian to find them, and the details differ: Majorian's bust is helmeted and in profile, while the medallion shows Justinian helmeted and without a shield. The reverse inscriptions sometimes end with a \*, C, IC or Ω. One would expect coins with sigla to be Italian, but these are Constantinopolitan in appearance and quite unlike the emperor's Italian issues.



Justinian II's second reign saw a return of the effigy of Christ, but this time the representation is of a young man having short curly hair and virtually beardless. This unusual effigy, which was believed to represent the 'true likeness' of Christ without the classical overtones of the venerable Pantocrator type, is associated by art historians with Syria, but the reason for the replacement of one type by the other on the coinage is unknown. The coins form two classes, one with Justinian alone – this was formerly assigned to his first reign – struck in 705 [301], and the other with Justinian in association with his son Tiberius [302]. The first group have on the reverse the bust of Justinian, with short beard, wearing a loros and holding a cross potent on steps and a globus – or rather a circle – surmounted by a patriarchal cross, the circle being inscribed with the word PAX. The inscription was also changed to  $\text{O}\text{N}\text{I}\text{J}\text{S}\text{T}\text{I}\text{N}\text{I}\text{A}\text{N}\text{V}\text{S}\text{M}\text{V}\text{L}\text{T}\text{V}\text{S}\text{A}\text{N}$ , *Multos Annos* being a standard imperial acclamation. Justinian's introduction of it on the coins proved popular and it was continued by his successors from Anastasius II to Artavasdus. His second coinage replaced his bust with those of himself and his son, each wearing a chlamys and holding between them the cross potent on steps of the solidus type. The early coins show Tiberius very small, as an infant, but on later ones he is larger.

The solidi of Philippicus [303], Anastasius II [304] and Theodosius III [305] are all of traditional type, with virtually no attempt at portraiture, though the faces differ slightly in their shape and in the variations of the rather attractive hairstyle which was evidently fashionable at the time. They also differ in their costume and insignia: Philippicus wears a loros and holds a globus cruciger and a consular sceptre – it is the last time this appears on the coins – Anastasius II wears a chlamys and holds a globus cruciger and akakia, and Theodosius III wears a loros and holds a patriarchal cross on globus and an akakia. The officina letters ending the inscriptions are sometimes followed by B, Γ, or Θ under Philippicus, by Θ under Anastasius II, or by C under Theodosius III, the last being carried over into the first solidus issue of Leo III.

#### LIGHT-WEIGHT SOLIDI

The Heraclian period saw the end of the series of light-weight solidi inaugurated in the reign of Justinian I. The output seems to have reached its maximum in the middle years of the reign of Heraclius and then sharply declined. It lasted into the first coinage of Justinian II, but specimens of Constans II, Constantine IV and Justinian II are extremely rare. None of the coinages are tied to a single officina, and the issues with ΘS as the terminal letters of the reverse inscription have disappeared. No light-weight coins of Class III (629–31) of Heraclius are known, but this issue was a short one and a high proportion of existing specimens come from hoards in Cyprus, where such coins may not have been used.

*23 carats.* The 23-carat solidi customarily identified by the presence of a star in the obverse and reverse fields were still being struck during the first and second coinages of Heraclius, but

on the second the presence of two imperial busts on the obverse made it necessary to place both stars on the reverse [318]. The suspension of the issue in *c.* 615 suggests that they may have been connected with the needs of Syria, more especially since the Arab dinar of Damascus, when it came to be struck eighty years later, was of the same weight. The standard was briefly revived on the third coinage of Constans II, that showing him with a long beard, which was struck in 651–4. It there assumes two forms, some coins having a large star in the reverse field [319] and others  $\text{BO}\Gamma\text{K} - \Gamma\text{K}$  is the same as  $\text{K}\Gamma$ , i.e. 23 – in the exergue [320]. The issue of Justinian II revives the use of a star [322].

*22 carats.* Solidi with  $\text{OB} + *$  in the exergue are known for all issues of Heraclius except the rather rare Class III. They are not found later.

*20 carats.* These were by far the commonest type of light-weight solidus in the seventh century. The traditional  $\text{OBXX}$  [317] continued in use down to the end of Heraclius' reign but on his Class II it began to be replaced by  $\text{BOXX}$ , the die-sinkers having ceased to attach any specific meaning to the first two letters.  $\text{BOXX}$  [321] is found as late as Class III of Constantine IV and it accounts for a high proportion of the light-weight solidi found in central and eastern Europe. Light-weight solidi of Class IV of Heraclius are rare outside those of the Pereshchepino hoard, which are closely die-linked and presumably represent a single payment to some tribal ruler in south Russia. The occasional presence of a cross after  $\text{CONOB}$  on normal solidi is paralleled by  $\text{OBXX} +$  and  $\text{BOXX} +$  on many of the Pereshchepino coins. The frequency with which 20-carat solidi occur in central and eastern European coin finds suggests that their discontinuance *c.* 680 may be linked with Byzantine-Avar relations, which ended about that time.

#### FRACTIONAL GOLD COINAGE

The fractional gold coins which were struck continuously throughout the period were semisses and tremisses. Isolated examples of a half tremissis are recorded for Constantine IV and Philippicus [311], and they may have been struck for other emperors. In each case they are struck with tremissis dies, but on very small and thin flans, much of the design being consequently off the flan. They are too thin to be cut-down tremisses. A quarter solidus, weighing 1.10 g, is known for the second reign of Justinian II.

As in the previous century the fractional gold coins were regarded as of secondary importance. Normally a single type would be struck throughout each reign, no attempt being made to conform to the changing patterns of the solidi, even when new associations of emperors were involved. The only real exception to this rule was under Justinian II, though there are two groups of fractional coins of Heraclius of which the second betrays a faint consciousness of the existence of Heraclius Constantine. The regular obverse type, down to and including the very rare first coinage of Justinian II, was a characterless profile bust; after

that the coins bore the same facing bust as the solidus. The reverse types were a cross potent on globe for the semissis and a cross potent (with CONOB) for the tremissis. These were used by all emperors except by Justinian II on those issues where the bust of Christ occupies the obverse; on these the types of semissis and tremissis parallel those of the solidus in that the emperor is shown holding the traditional denomination symbol in his hand. Since the obverse type was the same for tremissis and semissis the mint often saved itself trouble by using the same obverse die for both denominations, and since it was usually the semissis die that was employed the inscription on the tremissis is largely off-flan. What appear to be officina letters occur on the first issue of Heraclius, but thenceforward the inscription settles down as a plain *Victoria Augus(torum)*.

The coins of Heraclius form two main classes, though the passage from one to the other cannot be dated precisely. Class I has usually a small imperial bust and the normal inscription is  $\Theta\text{N}\eta\text{C}\text{RACLI}\ \text{V}\text{SPPAVI}$ ; the reverse inscription normally ends  $\text{C}$  or  $\text{I}$  on the semissis and  $\text{S}$  on the tremissis and the lettering is small, the letters being carefully made without much use of punches. A variety struck during the first few weeks of the reign has  $\text{P}\text{C}\text{R}$  or  $\text{P}\text{C}\text{RP}$  instead of  $\text{PP}$ , like the earliest solidi. Class II has a larger and apparently older bust, the  $\text{L}$  in Heraclius' name usually has the form  $\text{I}$ , and there is a  $\text{T}$  before the  $\text{PP}$ ; the reverse inscription almost invariably ends  $\text{S}$  and the letters are large, with big globules at the end of each stroke [288, 289]. The intrusive  $\text{T}$  suggests that the inscription which the die-sinkers had in mind was  $\text{h}\text{C}\text{RA}\ \text{CONST}$ , but that from force of habit they half reverted to the older form. The transition from Class I to Class II cannot be precisely dated; it can scarcely have occurred as early as 613 but may have taken place in 629, when the solidi were redesigned. A variety of a Class II semissis has a  $\text{P}$  replacing the vertical stroke of the cross on the globe.

The coins of the years 641–85 all have basically the inscription  $\Theta\text{N}\text{CONSTAN}\text{TIN}\text{V}\text{SPPAV}$  and a profile bust [290]. The bulk of them must belong to the two long reigns of Constans II and Constantine IV, but no very clear distinction can be made between them. Those of rougher fabric, with inferior lettering and usually much fragmented inscriptions, are best attributed to Constantine IV. There is at Dumbarton Oaks a half tremissis of the latter group (0.65 g) struck with tremissis dies.

Justinian II's coinage inaugurated a new tradition. Some exceedingly rare coins with profile bust [306] are followed by plentiful issues of semisses and tremisses [307] having a facing instead of a profile bust of the same type as Class II of the solidus. His coins of Class III also reproduce the solidus types, but on the reverse of the semisses [308] and tremisses the emperor holds a cross potent on globe and a simple cross potent respectively instead of the cross on steps which he does on the solidus.

Leontius [309] and Tiberius III both follow the example of Justinian II in using a facing bust on the obverse, but revert to the traditional pattern for the reverse. The semisses and tremisses of Justinian II's second reign are miniature solidi, on the same plan as those of Class III of his first reign [310]. Philippicus, Anastasius II and Theodosius use the traditional

reverse types and facing busts similar to those of the solidi. There is a half tremissis of Philippicus (0.7 g) at Dumbarton Oaks [311]. For Anastasius II, in addition to semisses and tremisses giving him his full name, Artemius Anastasius, there are also ones on which only the name Anastasius appears.

## Eastern mints: silver coinage (Pls 18, 19)

The most striking single difference between the Byzantine coinage of the seventh century and that of the sixth is the existence, during a period of some sixty-five years, of an abundant currency in silver. Its existence must have helped to render tolerable the situation created by the decline of the follis, though it can scarcely have remedied all its inconveniences. Side by side with the new coinage of silver hexagrams there survived the use of special ceremonial silver coins, struck only occasionally and in small quantities and of a weight pattern unrelated to the hexagram in daily use.

### CEREMONIAL COINS<sup>1</sup>

The general reverse type of these coins is that of the cross potent between two palms which had established itself under Maurice and Phocas, though the details, notably the presence or absence of a globe and steps beneath the cross, differ slightly from reign to reign. There were commonly two 'denominations', one of about 4 g and the other about 2 g, but since the coinage did not serve a commercial purpose individual specimens often depart widely from these figures. The coins are often poorly struck on irregular flans, like those of the hexagrams. Several issues are known to us only in unique specimens, so more should still come to light.

Five classes are known for Heraclius. The first has as obverse type a profile bust [324] and the second the two standing figures of Heraclius and Heraclius Constantine (Consul Weber sale, II. 3130), as on Class 2 of the follis. They were probably struck for the consulship of Heraclius in 611 and the coronation of Heraclius Constantine in 613 respectively. The third [325] and fourth [326] have a more unusual obverse type: the standing figures of Heraclius and Heraclius Constantine, with Heraclius holding a globus surmounted by a Victory in the act of crowning him. The earlier class, on which Heraclius is shown with a short beard and Heraclius Constantine is small, presumably commemorates some unidentifiable victory of the early 620s; the later one, on which Heraclius wears the long beard introduced on his solidi in 629, must have been struck for the celebration of his triumph at the end of the Persian War. It was the last occasion on which this symbolic scene, so familiar in ancient art, was used in

<sup>1</sup> Since only a few of these exceptional issues are illustrated here, I include some references to specimens in easily accessible catalogues.

Byzantine coinage. Finally, there was a ceremonial issue, with the standing figure of Heraclius and his two sons (*BNC* Pl. XLIII. AR/16).

Under Heraclius' successors the prestige of ceremonial coins evidently began to decline, for the mint ceased to make obverse dies for them. Ordinary solidus dies were used instead, and the reverse dies, which would not normally change, were probably passed on from one reign or at least from one issue to the next.

There are no ceremonial coins that can be ascribed to Heraclius Constantine, but for Heraclonas there is one with the usual beardless bust and small head (W. Pl. XXXI. 7), and for Constans II there are ones showing him with a short beard (T. Pl. 54. 117) or with a long beard and helmet, in company with his son (W. Pl. XXXI. 12), the latter probably struck when Constantine IV was associated emperor in 654. A number of specimens of this issue, closely die-linked, came to light in a Silesian hoard in 1937. As ceremonial coins they had probably made part of an imperial gift to some prince in central Europe.

For Constantine IV two issues are known, their busts, beardless and bearded respectively, corresponding to those of Classes II and III of the solidi. A specimen of the first type occurred in the Silesian hoard just alluded to, and several others are known [327]. Of Justinian II we have only a single specimen, with beardless bust (T. Pl. 62. 73), and the series ends, so far as we know it, with one of Tiberius III [328] having on the reverse a cross potent on globe between two palms, without the traditional steps. These later coins are much below the customary weight of c. 4 g and are apparently of poor metal. Evidently it was no longer thought worth the trouble of issuing special ceremonial coins, and the occasional solidi struck in silver [329] which we find rather frequently at about this date were probably intended to fulfil the same function.

#### HEXAGRAMS

The hexagrams were much more important. They were first struck in 615, and the impression which the revival of a silver coinage made on contemporaries is shown by the circumstance being referred to in the *Chronicon Paschale*, for Byzantine writers rarely allude to anything concerned with money. The bulk of Heraclius' issues must date from after 621, when the Church agreed to place its treasures at the emperor's disposal in the crisis of the Persian War. The coin took its name from the fact that it weighed 6 scruples, i.e. 6.82 g. It was thus much heavier than the denarius of the early Empire or the so-called 'siliqua' of the fourth century. Like so much else in Byzantine monarchy and administration it represents in some sort a reversion to a Hellenistic past. The reverse type for almost the whole of its history was a cross potent above a globe on three steps, with the inscription *Deus adiuta Romanis* ('O God, bring help to the Romans'). The obverse shows the seated figures of Heraclius and his son. The value of the coin is uncertain. It is usually regarded as a miliaresion, i.e. a double keration or one-twelfth of a solidus, but Wroth believed it to be a double miliaresion, one-sixth of a solidus. This would imply that it was a token coin, circulating at well above its real value.

Only two types of hexagram were issued by Heraclius. Type I is that with the two emperors seated [330–2]. There are a number of varieties with letters or symbols in the reverse field: an I to the left, an I, K, star, or monogram to the right, or an I and a monogram or a Q and V flanking the central cross. The monogram and the K stand for Heraclius and (Heraclius) Constantine respectively, but why such sigla should be used and how the others are to be interpreted is unknown. On some issues the bottom bar of the cross is forked and extends downwards on either side of the globe; there may even be a horizontal bar across it like that of the letter A. Type II has the usual reverse but the standing figures of Heraclius and his two sons on the obverse [333]. Specimens are rare and Heraclonas is shown crowned, so the issue can be dated 638–41, Type I having been struck over the whole period 615–38.

The use of the hexagram was in the main limited to the eastern half of the Empire, but some rare specimens of Type I are known which were struck in Italy, presumably at Ravenna [323]. They have all the features of the Ravenna solidi of Class II: obverse in low and reverse in high relief, with in this case a wreath border on the reverse instead of an annular one; broad head and flat crown for the two sovereigns; and usually western letter-forms (D, H, V) instead of eastern ones. They never became a regular part of the western currency system, and it seems likely that the few that were struck drifted to the East, where they would be more acceptable. One of Tolstoi's specimens was bought in the Caucasus.

Rare hexagrams with *Constantinus* inscriptions and a facing bust with small head [334] are best ascribed to Heraclonas. For Constans II there are five classes, with obverse types corresponding to those of the solidi. Classes I to III have the facing bust of Constans alone, either beardless [335] or with a short or long beard [336]. Some specimens of Class I have the beard added as a row of dots, like the solidi of Years 5 and 6. Coins of Class II have normally a B or S in the reverse field. Class IV [337] has as obverse type the crowned busts of Constans II and Constantine IV – the coins have normally B or C in the reverse field – and Class V [338] has the same two emperors (but Constans helmeted) and on the reverse the standing figures of Heraclius and Tiberius on either side of the customary cross. The inscriptions on this class are reduced to only a few letters and there is normally no symbol in the reverse field, though one specimen with E has been recorded and there is sometimes a Θ beneath the steps of the cross.

Constantine IV's hexagrams are essentially of three classes. Class I has his beardless bust holding a globus cruciger [339], Class II his armoured bust [340] beardless, holding a spear (no shield), and Class III his bearded bust, similarly attired. All have his brothers on the reverse, as on the last type of the preceding reign. The obverse dies share the peculiarities of those of the solidi, the inscription at the beginning of the reign referring improperly to two emperors named Constantine and in later issues being reduced to a few isolated letters. The reverses sometimes include a Θ, either in the field or substituting for the globus under the cross [341]. The coins with Θ under the cross perhaps weigh a little less than usual, but at this time the weights are so irregular that it is difficult to be sure. One is tempted to assign them to Thessalonica, but they do not differ stylistically from the other coins. There is also a variety with XX in the exergue [342] which Ratto assigned to Carthage, but it is certainly eastern.

Presumably the XX was intended as a mark of value, but it is difficult to see how it should be interpreted – perhaps as 20 folles. The weights of these coins may be slightly less than the others, but this is not certain.

Hexagrams of Constantine IV are quite common, but none are known that correspond to his last type of solidus, after he had deposed his two brothers (681), nor any of the first years of the reign of Justinian II. There is a very rare coin (W. Pl. XXXVIII. 23) with a bearded bust, corresponding to that of his second type of solidus; its reverse type has the usual hexagram inscription but a type identical with that of the solidus, the traditional globus between the cross potent and the steps being eliminated. On the last coinage of Justinian's first reign the assimilation to the solidus is complete, the hexagrams being struck with obverse and reverse solidus dies [343]. Since they retain the traditional weight, however, they are much bigger and thicker than solidi. These coins are not rare. The only later hexagram known is one of Tiberius III, having as reverse type a cross potent on globe above two steps and the inscription VICTORIAAVGVS borrowed from the semissis [344].

Hexagrams later than 681 are thus virtually unknown, and the disappearance of a denomination that for over sixty years had played a major role in Byzantine currency is something that obviously requires explanation. It may possibly have been a consequence of the great Muslim currency reform carried out by the Caliph 'Abd al-Malik in the 690s, which by establishing a different mint ratio between gold and silver from that obtaining at Constantinople may have drained the Byzantine Empire of its silver, giving it gold in exchange. This explanation would accord well with the abundant Byzantine gold coinage of this period, which seems out of keeping with the political misfortunes of the Empire and its miserable copper coinage, but it implies that there may have been a much more abundant silver coinage for c. 680–95 than the number of surviving specimens suggest. This is not impossible, for a loss of silver to the Muslim world would have particularly affected these years, while coins hoarded earlier in the century would have escaped.

### Eastern mints: copper coinage

The chief features of the copper coinage of the seventh century have been referred to already. Its inferiority to that of the sixth century is only too evident: the small ill-struck folles of Constans II seem worlds apart from the handsome coins of the best period of Justinian. The difference was in large measure due to the combination of constant overstriking with the decline in weight. Either factor in isolation would have been serious, but overstriking was now being practised on old coins whose weights were repeatedly reduced by clipping pieces from their edges. Further, although the designs were changed much more frequently than in the past, the imperial representations on the obverses remained at a low level artistically and the reverse types did little more than experiment with permutations in the forms and relative positions of dates and marks of value.

Eastern coinage, from 610 onwards, came overwhelmingly from the mint of Con-

stantinople. Antioch was never open at all. It is true that there exist Heraclian two-figure and three-figure folles, dated Years 8, 9, 12, 13, 14 or 17, with badly formed mint-marks  $\text{TH}\epsilon\text{C}\text{P}'$  or  $\text{THP}$ , which have led some scholars to postulate a reopening of the mint in the 610s and in the 620s, but their poor style and the abnormal features of their die linkage – coins with CON linked with ones of  $\text{TH}\epsilon\text{C}\text{P}$ , a coin of Year 7 sharing a common obverse with one of Year 13, the existence of seven specimens of Year 14 from the same pair of dies – makes it unlikely that they are anything more than local Syrian imitations of the Persian occupation period. Alexandria lasted only into the early years of Constans II, and Thessalonica, Nicomedia and Cyzicus were closed in 629 and important only in the early years of Heraclius' reign. Though the sporadic functioning of such mints as Seleucia and Cyprus increased the variety of eastern issues it did little to augment their volume.

#### CONSTANTINOPLE

##### *Heraclius, 610–41 (Pl. 20)*

*Follis.* The folles of Heraclius mark the beginning of the process which was to develop so markedly under Constans II, that of frequent changes in type, though the six classes of Heraclius can scarcely be compared in either number or inventiveness with those of his successor's reign. The features that characterize them are for the most part functional in character. The transition from the facing bust of Class 1 to the two standing figures of Heraclius and Heraclius Constantine on Class 2 was intended to make known, in as clear and emphatic a manner as possible, the elevation of Heraclius' infant son to the rank of Augustus. Similarly, after the influence of Martina had been enhanced by the birth of a son in 616, this was likewise made plain on the coins of Class 3, in which she is shown in company with her husband and Heraclius Constantine. Class 4 involved no change in obverse type and had no dynastic significance, but it was accompanied by a serious reduction in weight. Class 5 was intended to signalize both a monetary reform – a return to a higher weight standard, with a revival of half folles and even of the unusual 30-nummus denomination – and Heraclius' achievements as a great military leader, the conqueror of Persia. Heraclonas' elevation to the rank of Caesar, however, was not noticed on the copper coinage of Constantinople, though it was on the gold and on the copper coinage of Ravenna, and it was not until Year 30 (= 839/40), a year after the boy's elevation to the rank of Augustus (3 July 838), that he was allowed to appear on the copper. It seems likely that both the elimination of Martina from the coinage in 629 and the delay over the association of Heraclonas were due to Heraclius' appreciation of the intense hatred aroused by his second wife and by the fear of her intrigues on behalf of her son.

The decline in weight of the follis under Heraclius is as characteristic of it as its slovenly execution. It can best be set out in a table of the average and top weights of specimens at Dumbarton Oaks, and, for comparison, in the British Museum (Table 4). A more exact



Table 4 The decline in weight of the follis under Heraclius

Type	Reference		Year	Number of specimens	Average weight	Top weight
	DO	Wroth				
1	69–71	109–15	1–3	18 (7)	10.8 g (10.5 g)	14.6 g (11.6 g)
2	76–83	116–44	3–6	60 (29)	10.9 g (11.1 g)	14.0 g (13.5 g)
3	89–96	170–80	6–14	16 (8)	8.2 g (9.0 g)	9.6 g (12.3 g)
4	99–103	181–94	15–19	21 (24)	5.6 g (5.8 g)	7.3 g (7.3 g)
5a	105–6	145–58	20–1	21 (24)	9.8 g (10.6 g)	12.6 g (14.8 g)
5b	107–16	159–69	22–30	30 (11)	5.4 g (5.5 g)	7.3 g (8.5 g)
6	125–7	197–201	30–1	15 (5)	5.2 g (4.4 g)	5.4 g (6.0 g)

The coins are of the mint of Constantinople. The figures are those for coins at Dumbarton Oaks, comparable figures for the British Museum being given in parentheses.

statistical study would not be profitable, since many of the coins are in poor condition and struck on flans produced by the haphazard cutting-down of earlier coins. The table shows that at the end of the reign the follis weighed less than half what it had done at the beginning – and, it may be added, less than a quarter of what it had done at its peak exactly a century before. The numbers of specimens are also of some significance. Though mint output cannot be accurately deduced from museum holdings, the falling off in the number of coins of the late 610s, and in the 630s after the abortive reform of 629/30, probably reflects a marked diminution in mint output during these periods.








The main characteristics of the six classes of follis are set out in Table 5, but a few comments on the types may be useful. Five officinae were in operation throughout the reign, though not all date/officina combinations are known.

1 [352]. The inscription is normally  $\text{ONhRACLI}\ \text{VS}\text{PERPAVI}$ . In Years 1 and 2 Heraclius usually holds a shield and wears a helmet with plume, while in Year 3 he wears a cloak and crown with cross, but there is some overlap between the two varieties. The type represents a revival of that of the early years of Maurice, and where the inscriptions are only partially legible it is easy to attribute the coins to the wrong emperor.

2 [353]. The inscription is theoretically  $\text{ONNheRACLIETheRA CONSTPP}$ , but is usually incomplete. Heraclius Constantine is shown much smaller than his father, though of course much larger than his real age would imply. In Year 3 the die-sinkers sometimes misunderstood the globus cruciger held by each emperor and provided them instead with long cross-sceptres. There is often a cross instead of a Christogram over the M.

3 [354]. Martina was not shown on either the silver or gold, but there was good precedent from the previous century for the Augusta appearing on the copper. On well-engraved dies she is clearly recognizable by her crown adorned with pyramids and long pendilia, and her position on the left of the coin shows her as taking rank after her

*Table 5* Classes of Heraclius' folles (Constantinople)

Class	Year	Obverse	Reverse	Plate 20
1	1–3	Bust facing		352
2	3–6	Two figures standing, both robed		353
3	6–13	Three figures standing, Martina on l.		354
4	15–18	Three figures standing, Martina on l.		355
5a	20, 21	Two figures standing, Heraclius in military costume		356
5b	21–30	Two figures standing, Heraclius in military costume	 (smaller flans)	357
6	30, 31	Three figures standing, Heraclonas on l.		358

stepson Heraclius Constantine. Sometimes, at Constantinople as well as at provincial mints, the positions are accidentally reversed and very frequently the die-sinkers have not troubled to make any distinction between the sex and ornaments of the three figures.

4 [355]. Requires no comment.

5 [356, 357]. The figure of Heraclius Constantine is as on earlier coins, save that he is much larger, but that of Heraclius, without paludamentum and wearing a cuirass and short kilt, holding a long cross-sceptre in his right hand and resting his left hand on his hip, is a very striking novelty. There are many varieties, particularly in the later years.

The two figures are sometimes identified by a monogram of Heraclius to the left and a K to the right, or there may be a cross or monogram  $\text{J}$  between the heads. On the reverse the cross and C above the M is often replaced by a simple cross or by a monogram. On coins of Year 30 the CON is sometimes followed by  $\Theta$ , which is common on reverses of Class 6 and possibly implies that the coins were intended for Thessalonica.

6 [358]. Like Class 3 this has three standing figures, which are often very indistinct on poorly preserved coins, but one can usually make out the details of Heraclius' military costume and distinguish his long cross-sceptre from the globus cruciger borne by each of his sons.

*30-nummus piece.* Limited to Classes 5 and 6.

5. A coin of this denomination, with mark of value  $\Lambda$  between ANNO and XX, was introduced as part of the reform of Year 20 and was probably struck only in that year [359]. Specimens are usually overstruck on folles of previous issues.

6. A coin with a similar reverse, but having as obverse type a single long-bearded bust like that of the decanummium of Year 30, has been published by Bates. Though the date is illegible, the coin must also belong to the same year.

*Half follis.* The half folles of Heraclius are very rare and have often been misattributed. Their obverse types are generally the same as those of the folles, but Martina is omitted on coins of Classes 3 and 4 and no coins of Class 6 are known.

1. Obverse type as the follis, reverse with K, date and officina letter [360]. This type was also used at Nicomedia and Cyzicus, so we have the same problem as under Maurice of separating the products of the three mints. Those of Cyzicus (bust with shield) are the most distinctive; a comparison of 419 and 420 on Plate 24 shows at once that both coins belong to the same mint. Coins of Officinae  $\Gamma$ ,  $\Delta$  and  $\epsilon$  must in any case belong to Constantinople.

2. Obverse type as the follis, but with inscription reduced to a few letters. Specimens are extremely rare, the coin illustrated [361] being of Year 6 (Officina  $\Gamma$ ).

3. Some coins of Year 7 attributed by Wroth to Constans II (W. 287–8, nos 265–6; Pl. XXXII. 16) belong to this class, having Heraclius and Heraclius Constantine standing, without Martina.

4. Heraclius and Heraclius Constantine standing, without Martina; reverse of usual type but with Christogram instead of cross above. There are two of Year 17 (Officinae A and  $\Gamma$ ) at Dumbarton Oaks.

5. Obverse type as follis, reverse of usual type. Fairly common for Year 20 [362] and evidently intended to play a role in the reformed currency begun in that year. Other years are also recorded (21, 22, 23, 27, 30), those from Year 22 onwards being very small in size [363]. Four coins of this class in the British Museum were misattributed by Wroth to Constans II (W. 287, nos 261–4).

*Decanummium.* The correct classification of the rare decanummia of Heraclius is a still unsolved problem. Apart from those of Thessalonica they have no mint-mark, and since the types are different from those of the follis and half follis they cannot be easily distributed between mints on grounds of style. For the present they must be left to Constantinople, with the proviso that some of the earlier ones will eventually have to be assigned elsewhere.

1. Inscr., facing bust./Large I, between star and officina letter, with CON in ex. These coins are undated, but evidently correspond to Class 1 of the follis (Years 1–3). (*DOC* 2, Pl. XI. 75)
2. Inscr., facing bust./Large X, with date numeral to r. Recorded dates are 3, 4, 5 and 6, so that it corresponds to Class 2 of the follis. [364]
3. Inscr., profile bust./Large X, with date numeral to r. Recorded dates are 8 and 13. [365]
4. No inscr., facing bust with long beard./Large I between star and [X]XX (vertical). This coin, which is unique, is too light (1.16 g) to be attributed to Year 20, though one would expect decanummia to have been struck in this year. (*DOC* 2, Pl. XIV. 128)

*Pentanummium.* There are two types of pentanummium, one with a facing bust and € accompanied by a cross [366], the other with a profile bust and € accompanied by an officina letter. Like the decanummia with the same obverse types, they correspond to Classes 1 and 2 of the folles respectively.

#### *Heraclonas, 641*

As already noted, the attribution to Heraclonas of folles with a facing bust and a reverse type having an M and an *ananeosis* inscription must be abandoned. Both he and Heraclius Constantine must, at least for the present, be left without any Constantinopolitan copper coinage.

#### *Constans II, 641–68 (Pl. 21)*

The copper coinage of Constans II in the East was practically limited to the mint of Constantinople, though there were brief issues at Alexandria in 641/2 and again in 645/6. It mainly consisted of folles; half folles and other fractions were only struck in very small quantities, and for many issues of the reign are unknown. The explanation was no doubt the decline in the weight of the follis itself, which made fractions of it practically unnecessary. The coins are all overstruck on flans produced by cutting down earlier issues, and are usually in such poor condition that their precise metrological study is impossible. The normal weight seems to vary between 5 g and 3 g, but how far they were changed from one issue to another we cannot say. Though the designs show a good deal of ingenuity and inventiveness, if not a

high level of aesthetic judgement, the standard of striking was almost unbelievably bad: they represent perhaps the most slovenly work with which any numismatist will ever be brought into contact. Though they are not rare their study is extremely difficult, for dates, officina letters, and other elements essential to their classification have often failed to register or are rendered indecipherable by the remains of earlier striking.








*Follis.* The issues of the reign as they were conceived to be in 1968 are set out in Table 6 on p. 112, which is taken from *DOC* 2, p. 409. G. E. Bates has proposed a reclassification employing letters (Classes A–I) instead of numerals in order to take account of the facing-bust type dated Year 3 which in 1968 I attributed to Heraclonas, but he omits the bearded specimen of the same type cited by Wroth and a further type for Year 3 published by Bendall. Since there are also uncertainties about the later coinage it is clear that the time has not yet come for a definitive renumbering, and it therefore seems best to adhere to the *DOC* system with the following additions.

- 2 bis. Year 3. Bust facing./M, officina letter beneath, cross above, ANA vertically on l.,  $\Pi\epsilon\omicron\Upsilon$  in ex., II/I on r. [369]
- 3 bis. Year 3. Emp. standing./Large  $\Pi$ , ANA vertically on l.,  $\Pi\epsilon\omicron\Upsilon$  in ex., II/I on r., officina letter in ex.
- 4 bis. Year 11. As 2 bis, but bust bearded. (W. 180. Specimens with a legible date have since come to light.)

The characteristic feature of classes 1, 2, 3, 3 bis and 4–7 of the reign is the obverse type, a standing figure of the emperor, bearded from Class 5 (651/2) onwards, holding a long cross – a Chi-Rho sometimes substitutes for the cross – and a globus cruciger and accompanied by the inscription  $\epsilon\Nu\tau\omicron\upsilon\tau\omicron\ \nu\iota\kappa\alpha$  ('In this, conquer'), variously arranged and with the  $\omicron\upsilon$  of  $\tau\omicron\upsilon\upsilon\tau\omicron$  often in the monogrammatic form  $\delta$ . The inscription was the Greek form of *In hoc signo vinces*, and it was hoped that it would inspire the armies of the new Constantine to victory over his Muslim foes in the same way that it had ensured the success of Constantine I at the battle of the Milvian bridge. The sequence is broken, for reasons unknown to us, by Class 2 bis, having on the obverse a beardless facing bust and the unusual obverse inscription  $\text{INPER CONST}$  [369]. The reverse inscription, on Classes 1–5, is  $\text{ANANEO}\varsigma$ , i.e. ἀνα-νέωσις ('renewal'), the ANA initially replacing the traditional ANNO but the arrangement of the whole word in relation to the mark of value varying from one class to another, and the last 'letter' ( $\varsigma$ , often having the form S or even I) being an abbreviation mark and not an S. The letters or strokes below the mark of value were a source of much perplexity to Wroth, who supposed that they might be added together as regnal years. In reality one is the officina letter, invariably A–E, and any others represent the date.

Most of the details of Classes 1–7 require no particular comment, but Class 2 is noteworthy for the  $\omicron\Phi\text{A}$ , i.e.  $\delta\phi\iota\kappa\kappa\iota\nu\alpha$ , to the left of the mark of value. It indicates very clearly the significance of the first letter beneath the  $\Pi$ , the II beside the  $\Delta$  [368] representing

Table 6 Constans II: folles of Constantinople

Class	Regnal years	Dates	Obverse	Reverse	Plate 21	Other references	
						W	DOC
1	1, 2	641–3	Emp. standing		367	101–9	59, 60
2	2	642/3	Emp. standing		368	—	61
3	3	643/4	Emp. standing		370	—	62
4	4, 5, 6, 7	644/5 ff.	Emp. standing		371–2	110–25	63–8
5a	11	651/2	Emp. standing with long beard		373	126–35	69
5b	12, 13, 14, 15	652/6	Emp. standing with long beard	As last, but * above M	374	136–54	70–4
6	15, 16	665/6, 656/7	Emp. standing with long beard		—	163–79	75–6
7	15, 17	655/6, 657/8	Emp. standing with long beard		—	155–62	77–8
8	15, 16, 17	655/6–657/8	Two figures standing	As last	375	181–98	79–81
9	19, 20, 21, 23	659/60–663/4	Emp. standing, armoured, date to l. M and officina letter r.	Three standing figures	376	199–232	82–6
10	25	665/6	Two figures standing	M between two figures	—	254–7	87

the date (Year 2). The word is otherwise unknown, but was evidently parallel to ὀφίκκιον, i.e. *officium*, which occurs in late Roman and Byzantine documents. The ΚΩΝCΤΑΝ on Class 6 marks the revival of a mint-mark, which had been absent from Classes 1–5; with Class 7 it becomes the more familiar CON. Some confusion is caused by the very haphazard interchange of Greek and Roman numerals – Class 5 starts with ΙΑ and continues with XII, XIII, etc. – and by the inexplicable overlapping of types and dates in Years 11 and 15–17. No folles are known of Years 8–10, since our knowledge of the coinage depends mainly on hoards of the early or later years of the reign, so it is possible that new types may yet come to light.

Classes 8–11 had to take account of the association of Constantine IV, and in due course of Heraclius and Tiberius, as co-emperors. The obverse of Class 8 [375] revives that struck by Heraclius between 630 and 640, so that confusion between the coins of the two reigns is possible, but those of Constans II are much smaller in size and differently dated. For the last decade of the reign there are three classes, but not all years are accounted for and one of the classes is undated. It cannot indeed be regarded as certain that Class 11 [377, 378] belongs to 666–8, as suggested in the table, but it is reasonable to suppose that it corresponds to Class VII of the solidi. In Class 9 [376] there is the same confusion of Greek and Roman numerals that had occurred earlier in the reign (ΙΘ, XX, ΚΑ, ΚΓ), as well as occasional muling of officina letters. These were placed first on the reverses of the coins, later on the obverses, the period of transition seeing the simultaneous use of dies having officina letters that did not match each other. Coins of Class 11 have sometimes a θ in the exergue [378], which may indicate a connection with Thessalonica.

*Fractions of the follis.* The fractional coinage of the reign is rare, and there has been much confusion with coins of the later years of Heraclius. No pentanummia are known at all, and the only decanummia are coins of the last years of the reign [385], having on the obverse the facing bust of Constans II, with long beard and moustache, and on the reverse an I between the date and the officina letter, with CON in the exergue. Several classes of half folles are known and probably more await discovery. Those identifiable with certainty have a facing bust with short beard [379], sometimes taking the form of a row of dots [380], a standing figure in military costume [381], or a facing bust with long beard [383, 384]. Coins with two standing figures [382] can be separated only with difficulty from corresponding issues of Heraclius of the 630s, since the dates on the reverses, which should make the distinction clear, are only rarely legible.

#### *Constantine IV, 668–85 (Pl. 22)*

Constantine IV's copper coinage forms a complete change from that of his predecessor. Instead of small ill-struck pieces of copper, constantly changing in design and practically confined to folles, it represents an attempt to recreate the heavy follis of Justinian I's day,

with corresponding lower denominations down to the pentanummium and including even the rarely struck 30-nummus piece. The actual striking, however, was often slovenly, and the chronological pattern of the issues is difficult to follow. The big folles seem to have been minted only at intervals and perhaps served a mainly ceremonial function, while the 30-nummus pieces and pentanummia are very rare. The coins mainly struck were half folles and decanummia, particularly half folles, but these are very variable in size and there may have been considerable inflation during the 670s, when Constantinople was constantly under siege by the Arabs. The main issues of half folles and decanummia have the marks of value, K and I respectively, accompanied by much smaller Ms and Ks [392–5], probably implying a revaluation of the money of account in relation to the solidus, the new half folles and decanummia having the same value as the old folles and half folles respectively.

The folles are of five classes, only the first and last being at all common. Classes 1–4 have the standing figures of Heraclius and Tiberius accompanying the mark of value on the reverse, and so must have been struck during the twelve years 668–80; Class 5 has Constantine IV alone, and the coins are all dated to the last two years of the reign (Years 30, 31). Class 1 [386] has a beardless bust of Constantine IV wearing helmet and armour (without shield) and holding a globus cruciger; it can be formally dated 668–74 but was probably concentrated in 668/9, the year of Constantine IV's accession. Classes 2 and 3 [387] have a three-quarter facing bust with spear, the bust of Class 3 showing the emperor bearded. Both classes are extremely rare and were probably struck in 573/4, to mark the twentieth anniversary of Constantine IV's crowning as co-emperor in 654. Class 4 resembles Class 3, but the emperor now holds a shield; it can be dated 674–80. The same obverse type continues on to Class 5 [388], from which the standing figures of Constantine's brothers have been dropped. The only known three-quarter follis corresponds to Class I [389].

Only three classes of half follis are known, and their chronology is rather uncertain. Classes 1 and 2 [390, 391] both have on the reverse a large K, with ANNO to the left and CON to the right. The absence of a distinct date numeral suggests that the K serves in a double capacity, as both mark of value and as (Year) 20, so the two series of coins are perhaps to be assigned to 673 and 674 respectively. Their issue was followed by the fairly common coins of Class 3 [392, 393], which apparently covered the decade 674–85 and vary in weight from c. 10 g down to c. 3.5 g.

The decanummia have on the reverse a large I with a cross to the left and a K to the right, together with a cross above and CON in the exergue. They form basically two groups, according to whether they have a facing bust with a globus cruciger [394] or a three-quarter bust with a spear [395], but these can be further subdivided according to the form of the plume on the helmet, the presence or absence of diadem ties, etc. As many as seven variant forms have been noted, but how many of these should be regarded as substantive classes is less clear. There are, finally, at least two classes of pentanummia, showing the emperor with a spear and either beardless (no shield [396]), or bearded (with shield).



*Later emperors, 685–717 (Pl. 23)*

The copper coinage of the three decades 685–717 can be dealt with very briefly, for the number of types in each emperor's reign was always small and the coins are for the most part rare. Most of the types are illustrated on Pl. 23. The follis remained a fairly substantial coin, just over an inch in diameter and sometimes weighing 5 g or 6 g, up to the first year of Justinian's second reign (705/6), but thereafter its size fell off greatly, the coins being usually under an inch in diameter and rarely above 3 g or 4 g in weight. The design of the imperial bust on the obverse usually corresponds to that of the solidus, while the reverse type is regularly a simple M, K or I. The date numeral is often accompanied by a tick, either above and below or simply below, and on coins of Year 20 of Justinian II there is sometimes a sign which looks like an R reversed [407]. Its meaning is uncertain. The suggestion that it is a monogram of *Tiberius* is fanciful, but *restitutus* or *restauratus* seems possible. The only exceptional type is one struck under Tiberius III, who followed his issue of coins having an ordinary facing bust [399] with one having a standing figure [400]. Fractions are rare, those of Justinian II and Leontius being often overstruck on quartered folles of Constantine IV [408, 409].

## THESSALONICA (PL. 24)

The coinage of Thessalonica was limited to the first two decades of Heraclius' reign. The mint continued the tendency already apparent in the last years of Maurice and under Phocas to strike folles rather than the half folles which had accounted for the major part of its output in the sixth century. Meaningless officina letters appear on the folles (always B, where the space is filled at all) and on the 30-nummus piece of Year 20 (Γ, Δ), these being copied mechanically from the Constantinopolitan coins that served as models. The mint-mark began as the traditional TES but was modified in the course of Year 4 to ΘΕC (rarely ΘΕS) on both folles and half folles. Only the folles and half folles, and one type of decanummium with a mint-mark, are identifiable with certainty, but other decanummia, and possibly pentanummia, may be amongst the coins usually ascribed to Constantinople.

Five classes of coin were struck.

1 (Years 1 and 2), having as obverse type a helmeted bust wearing a paludamentum. The reverse type is that of the last years of Phocas, i. e. the mark of value XXXX (with ANNO above on the follis) or XX and the date to the right.

2 (Years 2 and 4 recorded) has the same obverse type for the half follis and a profile bust for the decanummium (R. 1314), the marks of value being K and I. The follis is not known. The use of an exergual line on the half follis distinguishes it from the very similar coins of Maurice in cases where the obverse inscription cannot be read.

3 (Years 4–10, most of them recorded) has the same reverse type (normal mint-

mark ΘΕC) and as obverse type the standing or seated figures of Heraclius and Heraclius Constantine [413, 414]. The use of seated figures on the copper coins is peculiar to Thessalonica. The inscriptions, which are badly blundered, give the name of Heraclius only, not that of his son.

4 (Years 13–20, some not recorded) has the same reverse but three standing figures on the obverse [415]. The class is practically limited to folles, the half follis being extremely rare. Since there are coins dated ANNO XϚIIII (as well as ANNO XX) the numeral Ϛ should probably be interpreted as 5 (Ϙ) and not 6 whenever it occurs.

5 (Year 20), the reformed coinage issued by Heraclius after his return from the Persian War and having as obverse type two standing figures with Heraclius in military costume, is represented at Thessalonica by some very rare 30-nummus pieces [416]. Other denominations may yet come to light.

No coins later than Year 20 are known. Presumably the overrunning of most of the Balkan peninsula by the Slavs reduced the general demand for coin, while Thessalonica itself could manage with what it inherited from the past or currently received from Constantinople. The occasional occurrence of Θ on Constantinopolitan issues of later years (e.g. after CON on Heraclian folles of Years 30 and 31) may mean that such coins were intended for Thessalonica, and perhaps indeed struck there, but this is at best hypothetical.

#### NICOMEDIA AND CYZICUS (PL. 24)

Coins of Nicomedia and Cyzicus are practically confined to the early years of Heraclius' reign, when folles were struck in great quantity. The issues of the two mints present so many parallels that they can best be treated together. The folles offer no problems of identification, since they have mint-marks NIKO or KYZ, but half folles of Class 1, with the facing bust of Heraclius, are without mint-mark. Coins of Officinae Γ, Δ and Ε are necessarily of Constantinople, but the others, like those of the reign of Maurice, can be classified only by their style. Wroth put them all under Constantinople, but his Pl. XXV. 1, identical in style with the Cyzicus follis on the same plate (XXV. 11), should have shown him that this was impossible. In both mints there is an overlap of types in Years 3 and 4; apparently the new obverse dies showing Heraclius and Heraclius Constantine were made in Year 3 but the old dies with the bust of Heraclius alone remained in use until they were worn out.

The folles of Nicomedia are of four classes. Class 1, with helmeted bust wearing a paludamentum, ran for Years 1–4. The coinage consisted of folles [417], half folles, identifiable only by style, and very rare decanummia with mint-mark NIK [418]. Class 2, with the standing figures of Heraclius and Heraclius Constantine, ran for Years 3–6, but only the follis is known. Class 3, with three standing figures, is recorded for Years 6–8, when the activity of the mint was ended by the Persian invasion of Asia Minor.

The folles and half folles of Cyzicus of Class 1 (Years 1–4) differ from those of Con-

stantinople and Nicomedia in that they have consistently an armoured bust with shield, not with paludamentum, which helps in the identification of the half follis [419, 420]. A conspicuous feature is the presence of three large globules across the upper part of the cuirass; they are much more prominent than those on coins of Constantinople and are absent from those of Nicomedia. The decanummia of this class, with mint-mark KYZ, are undated. Folles of Class 2, with two standing figures [421], are known only for Years 3, 4 and 5, the Persian advance evidently having affected Cyzicus well before it did Nicomedia.

Both mints were briefly reopened in the middle 620s, striking folles and half folles of the type then current at Constantinople, with three standing figures and on the reverse ANNO above the M or K and a monogram (Ϡ or Ϡ̄) to the right or left [422, 423]. Coins of Years 16–19 are known. The existence of those of Years 16 and 17 is surprising, since it was in 626 that Constantinople was closely invested by the Avars and Persians, the latter occupying the Asiatic shore of the Bosphorus facing the city. No coins later than Year 19 have been recorded.

#### ALEXANDRIA (PL. 25)

Under Heraclius and his successors (to 646) the copper coinage of Alexandria made a considerable break with tradition. Though the denominations remained, as before, the dodecanummium and – more rarely – the hexanummium and trianummium, the obverse type of the dodecanummium was no longer a profile bust, as it invariably had been during the sixth century, but one or more facing busts or standing figures. These were mainly modelled on the types of the solidi and not the folles of Constantinople. The sequence of issues was first made clear by J. R. Phillips. The currency of the country was profoundly affected by the successive conquests of Egypt by the Persians and Arabs. The Persian occupation is customarily dated 617–28, but neither the opening nor the terminal date is certain: parts of Upper Egypt still recognized the imperial government in 618 and some scholars would postpone the fall of Alexandria till 619, while we cannot be sure that the Persians had not begun to evacuate the country before the peace treaty of 628. The Arab invasion began in 639 and by the end of 641 the Byzantine government had come to terms, though Alexandria was not formally handed over to the conquerors until September 642. It was reoccupied for nearly a year in 645–6.

During the first three years of Heraclius' rule no identifiable coins appear to have been issued. The mint presumably continued to strike the coins with profile bust and meaningless inscriptions which it had been issuing under Phocas. This seems a necessary deduction from the non-existence of any single-bust coins with inscriptions and the absence of the single-bust type without inscription from a currency hoard found at Antinoë which dates from early in Heraclius' reign (c. 615) and was studied by J. G. Milne. The identifiable coinage began after 613.

The dodecanummia have always as reverse types an IB, with some symbol between, and the mint-mark AΛEZ. The classes are as follows.

1 [434], with two facing busts and shortened inscription (e.g. ΘΘNNhΕΡΑC). The type is that of the solidi of Class II, the reverse of which may have suggested the cross on steps on the reverse of these coins also. An interesting variant of good style (T. 307) has the steps replaced by the letter N, probably – and perhaps under the influence of moneyers from Carthage – standing for *nummi*. The class can be dated 613–17.

2 [435] has a large facing bust between a star and crescent, with no inscription. The cross on the emperor's head is sometimes placed on an open crescent, the ends of which point upwards like two horns on either side. Phillips convincingly argued that the class, which was absent from the Antinoe hoard, should be attributed to the decade of Persian occupation (617–28). The star and crescent are common Persian symbols, being a regular feature of the borders of Sassanian dirhems. Phillips suggested that the bust was intended to represent either Maurice or the pretender Theodosius, on the ground that Chosroes would not have allowed himself to be depicted with a cross on his head, but one may doubt whether he would have known – or cared. His wife Sira was a Christian, and much earlier he had not been above presenting two gold crosses to the Church of St Sergius at Edessa as a thank-offering for the birth of a son. Coins of this class are extremely variable in size and weight; some specimens are 20/25 mm in diameter and weigh up to 20 g.

3 [436] reverts to the facing busts of Heraclius (with short beard) and Heraclius Constantine, but they now have between them a cross on steps. Phillips believed that this class antedated the Persian invasion, but there is at Dumbarton Oaks a mule with Class 4 and it is best dated 628/9.

4 [437], which was unknown to Phillips, has the long-bearded bust of Heraclius introduced in 629 and can be dated 629–31. The tier of steps below the cross on the reverse has been replaced by a Δ.

5 [438, 439], with a three-figure obverse, represents the coinage of 632–41, the obverse type being once again copied from the solidus. On the earlier coins Heraclonas is small and uncrowned; on the later ones he is crowned and the Δ below the cross is replaced by an M. This was presumably intended to show that the dodecanummium of Egypt had the same value as the follis elsewhere, the two coins being by that time of virtually the same weight.

For Heraclonas and Constans II there is a single type each, the coins of Heraclonas having the facing bust of the solidus [440] and those of Constans II a standing figure copied from the *En touto nika* folles of the capital [441]. The M below the cross on Heraclonas' coins establishes their position in the sequence of Alexandrian issues, making impossible their attribution to the early years of Heraclius.

In addition to these dodecanummia there are three groups of hexanummia and one of

trianummia, all assignable to the reign of Heraclius and probably contemporary with his Classes 1–3. The hexanummia have a plain S as reverse type, while on the obverse they have either a cross potent on steps accompanied by a blundered *Heraclius* inscription [444], a palm tree with fruit [443], or the standing figures of Heraclius and Heraclius Constantine [442]. The non-imperial type of the second class, combined with the great weight variations found in it, shows that it belongs to the period of the Persian occupation, as does the trianummium with the same type [445].

Our general picture of Alexandrian coinage in the last days of Byzantine rule is complicated by the fact that a specifically Muslim copper coinage did not begin in Egypt until the last years of the seventh century. The earliest dated coins are of the 730s, but undated ones with the simple *shadadah* of Egyptian fabric and provenance were probably struck as early as the 690s. This still leaves a half-century gap from the end of the Byzantine period, and it was evidently filled by the indiscriminate minting of pseudo-imperial folles copied from the coins of Heraclius, Heraclonas and Constans II. These imitations can be detected by the blundering of the mint-mark, which is already becoming evident on the coinage of Constans II and the last issues of Heraclius. Some of these variant forms were formerly identified with specific localities (ABAZ with 'Abasis' or Oasis, ΠΑΝ or ΠΙΟΝ with Panopolis, ΜΑΓΔ with Magdolon) on the assumption that in the early Arab period a number of local mints came into existence in the Delta, as they did in Syria and Palestine. ABAZ, however, is no more than a blundering of ΑΑΕΖ, and it is doubtful if the other forms have any real meaning. These relatively worthless coins usually occur in scattered finds rather than in hoards, which is not helpful either for their dating or for separating imperial issues from those of later date.

A remarkable feature of the Alexandrian coins of this period is their extraordinary variations in weight. They are in general much heavier than the miserable ill-struck ones of the reign of Phocas, and in Class 2 of Heraclius the divergences between individual specimens are enormous; some are only 15 mm in diameter and weigh 5 g, others are 25 mm and weigh 15 g. Nor is it possible to divide these into distinct 'heavy' and 'light' issues; there are no coherent weight patterns at all. The explanation of the phenomenon is provided by the glass weights of the early Arab period, which in addition to precisely calibrated pieces for verifying the weights of dinars and dirhems also include weights labelled '*Fels* of 22 *kharrūbah*' (i.e. carats), 'of 17 *kharrūbah*', 'of 30 *kharrūbah*' and so on. The copper coins passed by weight, not by tale, and instead of relying on marks of value it was necessary to have glass weights available for valuing them. The glass weights marked in this fashion date from the Arab period, but this does not necessarily mean that coins of abnormally large weight variations were equally late in date and should be relegated to the class of imitations. The variations first appear in the class attributed to the period of the Persian occupation, when solidi were no longer regularly available, and despite the M between the I and B on some of the later coins it seems likely that it was from then onwards that the copper coinage normally passed by weight.

## TEMPORARY EASTERN MINTS

Besides the traditional mints in the provinces, temporary mints were occasionally opened for the striking of regular coinage or for countermarking.

*Cherson*

This mint was briefly active during the early part of Heraclius' reign. It was responsible for the issue in c. 616 of an extremely rare follis (T. Pl. 51.371) having on the obverse an inscription and the standing figures of Heraclius and Heraclius Constantine, on the reverse the mark of value H and what is presumably intended to be the standing figure of Martina, though she lacks the characteristic crown of an empress with semicircular projections and pendilia. Its striking was no doubt suggested by the possibility of having three figures who could be arranged on the coins in the same way as those of Maurice, Constantina and Theodosius on the 'family coinage' of Maurice struck at the same mint not many years before. Solidi with an X that have been doubtfully attributed to Cherson have been alluded to already (p. 93).

*Bosporos*

Folles of Cherson, usually of Maurice but occasionally those of Heraclius and Heraclius Constantine, are sometimes found countermarked with the monogram of Heraclius. The evidence of find spots indicates that this was done not at Cherson but at Bosporos, the modern Kerch, at the eastern end of the Crimea. One can also ascribe to Bosporos an anomalous half follis of Constans II (T. Pl. 56.282), copied from the traditional type of Cherson, having on one face the standing figures of Constans II and Constantine IV and on the other that of Constans II accompanied by his initial K, with a B below.

*Jerusalem*

A follis dated Year 4 of Heraclius with the mint-mark ΙΕΡΟCΟΠ' came on the market in 1980, and a related one with XCNKA exists, showing that a mint for copper, and perhaps for gold (see p. 93) was opened in Jerusalem during the Persian invasion of 614/15.

*Seleucia and Isaura*

The two mints of Seleucia and Isaura, in south-eastern Asia Minor, were closely connected with one another, the folles produced in Year 7 at Isaura being identical in style with those produced by the same workmen in the neighbouring *Seleucia Isauriae*, the modern Silifke, in Years 6 and 7. Both were presumably brought into existence as a result of difficulties created by the Persian War, but we know no details.

The coins of Seleucia are folles and half folles of distinctive style, extremely negligent fabric, and inscriptions which are little more than a jumble of badly formed letters. There were mainly two officinae, A and B, though coins with Γ, Δ or Ε also occur. Officina A mainly produced folles having two busts as obverse type [428], Officina B mainly folles with standing figures [429]. Most of the coins are dated Year 7, but the mint must have been opened late in the previous year, for there are rare coins of Year 6. The mint-mark on the follis is SELISϚ, i.e. SEL(*eucia*) IS(*auriae*), the final Ϛ being an abbreviation mark. The LI was originally read as a single letter 4 and the mint-mark interpreted as Ephesus (Sabatier) or a blundered form of Theoupolis (Wroth). The rare half folles [430] have sometimes the mint-mark SEL', but in other cases no mint-mark at all, being only attributable to Seleucia through their general style. The unusual feature of two distinct types being produced simultaneously in a single mint is probably to be explained by the workmen having come from two different centres (Alexandria and Nicomedia?). By Year 8 the mint had been moved to Isaura (ISAYR), where two-bust folles, much rarer than those of Seleucia, were produced [431].

### *Cyprus*

Ten years after the closure of the mint at Isaura a mint was called into existence in Cyprus, probably at Constantia, for the striking of folles [432, 433], though once again we are ignorant of the precise circumstances. The obverse type consists of the three standing figures of Heraclius, Heraclius Constantine and Martina, the reverse of an M with the date (Years 17, 18, 19), the officina letter Γ, and the mint-mark KVIIP, often blundered. The model was a coin of Constantinople of Class 3 (Years 6–13), but the invariable Γ may perhaps owe something to familiarity with its use on the coins of Antioch in the preceding century. The coins are not rare and must have been struck in fair quantity.

Sometime in the reign of Constantine IV a mint was again opened in Cyprus for the countermarking of folles of Constans II. Since the Constantinian monogram used for the purpose (Ϛ) includes a conspicuous K, the function of the countermarking may have been to reduce the value of the coins from folles to half folles. Two large Cypriote hoards consisted entirely of such countermarked coins, which are virtually never found outside the island. Other coins circulating in the island were sometimes accidentally countermarked at the same time, and the fact that these include isolated half folles of Constantine IV [427] makes it clear that the countermarking belongs to Constantine IV's reign, not to that of Constans II.

### *Unattributed countermarks*

Besides the countermarks ascribed to Bosphoros and Cyprus, and the Sicilian ones to be discussed later, other countermarks are occasionally found on coins of the Heraclian period. The provenance of such coins is usually Syria, the Lebanon or Cyprus, but the numbers are

too small to warrant any conclusion as to their precise place of origin. The commonest of them is a simple Heraclian monogram (P<sup>h</sup>) usually found on folles of Maurice and imposed early in Heraclius' reign [425]. A rather similar monogram (P<sup>h</sup>) is sometimes found counter-marked on Heraclius' reformed folles of Year 20, and so must date from the 630s. It rather frequently occurs on coins already countermarked earlier in the reign [424]. Both these monograms are of the 'bar' type, with the letters P and h as the primary element. A 'cross' monogram of Heraclius (P<sup>h</sup>), which was also used as a countermark during the 630s, is usually found associated [426] with a later and always fresher countermark consisting of a 'cross' monogram of *Constantinus* (P<sup>h</sup>). Whether this refers to Heraclonas, Heraclius Constantine or Constans II, and what this double countermarking may imply, are problems still unresolved.

## North Africa and Sardinia (Pls 26, 27)

The Roman provinces of North Africa survived the fall of Egypt by over half a century, though Arab raids on Tripolitania began in the 640s and Kairouan, the future capital of the Arab province of Ifrīqiyah and less than a hundred miles from Carthage, was founded in 670. Carthage itself fell in 698, after having been briefly occupied in 695 and then recovered, and Ceuta, the last Byzantine outpost, followed it in 709. Even before 695, when Carthage was in danger, part of its mint seems to have been moved to Sardinia, for there exist coins of characteristically Carthaginian fabric which cannot easily be fitted into the African series. Certainly, for some twenty years from the reign of Leontius (695–8) onwards, there was a mint in Sardinia, for the coins are marked with an S in the reverse field. This could equally well be construed as Septem (Ceuta), but most specimens whose early history can be traced are known to have been found in Sardinia or have come on the market through Italian coin dealers. The mint was presumably at Cagliari.

The general pattern of the North African coinage in the seventh century presents some puzzling features. The gold consists almost entirely of solidi; semisses and tremisses of Carthage are of extreme rarity. This forms a striking contrast to the rest of the Empire, including Italy, where fractional gold was struck in abundance, and still more to the Germanic kingdoms of the West, where a reduced tremissis was practically the only denomination in use. One would have imagined that this absence of the lower denominations of gold would have led North Africa to adopt the hexagram, but it did not do so. The silver coins were small pieces weighing c. 0.5 g, only one issue of which seems to have been struck in any quantity. The copper, on the other hand, remained a good deal better than that of Constantinople. Only at the very end of the Byzantine period did it begin to decline.

The mint of Carthage was in many ways a law unto itself in respect of denominations and types. The pattern of issues in gold follows in the main that of Constantinople, though there are exceptions, but the external appearance of the solidi, steadily decreasing in diameter and



increasing in thickness until they assume a characteristically globular form, is quite different from those of the East and of Italy. Wroth, apparently following the arrangement in the British Museum trays worked out by Count William de Salis, also attributed to Africa a series of non-globular solidi of typically provincial fabric, but it is now recognized that these were struck in Sicily. The Carthaginian solidi are dated by indictions with some regularity up to the reign of Constans II, but only occasionally, or at least identifiably, thereafter. The silver and the copper coinage in the main use types not found outside North Africa, though the obverse busts usually follow the pattern of Constantinople and there is occasional borrowing of reverse types, as with the *En touto nika* folles of Constans II.

#### GOLD COINAGE

At least two and possibly three types of solidus were struck by Heraclius at Carthage, as against four at Constantinople. There are no coins showing Heraclius with a long beard and only one exceptional issue, whose African origin is contested, with three standing figures. The latter design was virtually precluded from normal issues by their globular fabric. Dating is by indictions, the numerals being placed at the ends of the obverse and reverse inscriptions. Type I is of Heraclius alone [446], with a facing bust, the coins being dated, as one would expect,  $\text{I}\Delta$  (= 610/11),  $\text{I}\epsilon$  (= 611/12) and  $\Lambda$  (612/13). Some of the coins with  $\text{I}\epsilon$  are much larger than usual and, if the attribution to Carthage is correct, suggest that the mint was trying to reverse the tendency for the module to decline, but the change was only momentary and by 613 coins of thick fabric were again being struck. The reverse type was a cross on steps. In 613 Type II, with the busts of Heraclius and Heraclius Constantine, began, the cross of the reverse being gradually modified into a cross potent and this being usually shown on two steps instead of three [447, 448].

The remainder of the reign involved the best part of two indictional cycles, 612/13–627/8 and 628/9–643/4, and it is not always easy to say to which indiction, and consequently to which date, a particular coin belongs. The best guide is the decreasing module and increasing thickness of the coins, but the differences in the later years are small and the indication is not very clear. Small varieties in the design of the crown and the elimination of the exergual line on the later coins are sometimes helpful. The exceptional three-figure issue, which Hahn would attribute to Sicily, is on a flan much larger than usual (18 mm) and is dated to the fifth indiction ( $\epsilon$  = 631/2); it evidently represents a special minting to commemorate the elevation of Heraclonas to the rank of Caesar in January 632. There are occasionally letters in the reverse field –  $\Gamma$  in Indictions  $\text{B}$  and  $\Gamma$  (628/9, 629/30),  $\Pi$  in Indiction  $\Delta$  (630/1),  $\Theta$  in Indictions  $\epsilon$  and  $\text{Z}$  (631/2, 633/4), a star in Indiction  $\Theta$  (635/6) – but their meaning is unknown. Mules between obverses and reverses of consecutive years are occasionally found. A few very rare semisses of varying dates are known, with a profile bust and a cross above a globe on the reverse [461].

There is a rare solidus of Heraclonas, with a small facing bust, dated  $\text{I}\Delta$  (= 640/1). As

noted already, this dating absolutely precludes the attribution of these 'small bust' coins to Constans II, and the youthful bust suggests Heraclonas rather than Heraclius Constantine.

Constans II's solidi follow the Constantinopolitan pattern more closely than was the case under Heraclius, though there is no type corresponding to Class VII of Constantinople, having on one side the bust of Constans II and on the other the standing figures of his sons, and on Classes V and VI the small module of the coins made it necessary to have busts instead of standing figures beside the cross. The obverse inscription, at the beginning of the reign, is DNCONS TANTIN (or variant), but this is gradually shortened to only a few letters. Dating accompanies only the reverse inscriptions, the letters being so tiny and ill-formed that they are often extremely difficult to read; it apparently ceases after Class IV. The number of steps below the cross is normally three. Letters or a star frequently occur in the reverse field, but their meaning is unknown. The issues are as follows.

- I. 641–7. Bust facing, beardless. Sometimes P, I, Θ or star in reverse field. [449]
- II. 647–51. Bust facing, short beard. Sometimes P in field r. [450]
- III. 652–4. Bust facing, long beard. Sometimes P in field r. [451]
- IV. 654–60. Two busts facing, Constans II with long beard. Sometimes P, IP or star in reverse field. [452]
- V. *c.* 660. Busts as last. On reverse, long cross on globe between busts of Heraclius and Tiberius.
- VI. *c.* 660–8. As last, but with cross potent on steps instead of cross on globe. [453]

The semissis of Constans II [462], of the same type as that of Heraclius, was ascribed by Wroth to Constantine IV. The correctness of the inscription and the details of the letter forms show that it was struck in the reign of Constans II, the date Λ (for A) at the end of the inscriptions corresponding to 642/3. Another specimen, dated S (= 646/7), is in the Bibliothèque Nationale, with a unique tremissis [463].

Four classes of solidus are known of Constantine IV, corresponding to those of Constantinople. With Class II there is a tendency for the module to increase, and specimens of Classes III and IV are 14/16 mm in diameter as against 11/12 mm at the beginning of the reign. The obverse inscriptions of Classes I–III are blundered and highly abbreviated (e.g. DON VTPCC) and there are no reverse inscriptions at all, but Class IV has reasonably correct inscriptions on both faces of the coin. The main characteristics of the types and varieties are as follows.

- I. 668–73. Beardless bust holding globus cruciger./Cross on steps between two busts.
- II. 674–*c.* 675. As last, but bust bearded./As last. [454]
- III. *c.* 675–81. Bearded bust with spear./Cross on steps between two standing figures, fragments of CONOB below. Varieties include various letters (Є, S, Z, H, Θ, I; also a cross or a star) in the field. The letters are indictional dates: Є = 5 = 676/7, etc. [455]

- IV. 681–5. Similar, but much better designed and with fairly correct inscriptions./Cross potent on steps with inscription and CONOB. There is sometimes a  $\Theta$  at the end of the inscription or in the field, or both. [456]

The three types of Justinian II's eastern solidi are also represented in Carthaginian fabric, (i) with beardless bust and inscription omitting  $\Theta$ N [457], (ii) with bearded bust and inscription starting  $\Theta$ N [458], and (iii) with bust of Christ (W. Pl. XXXIX. 3). The style of the first type corresponds to that of folles having a Carthaginian mint-mark, so that its attribution to North Africa is assumed. That of the second type, however, corresponds closely to folles which are better ascribed to Sardinia, and this reattribution carries with it the coins of the third type, which must represent the last issue of the reign. Specimens of the first type are often of small diameter (13 mm), but those of the later ones have reverted to the 16 mm of the end of Constantine IV's reign.

The mint of Carthage must have been moved to Sardinia by 695, but though we have a half follis of Leontius marked with S [493] none of his gold has so far been recorded with certainty. Solidi and tremisses are known for Tiberius III, of the usual type for this emperor and of the 'enlarged' Carthaginian module but with an S in the reverse field [459]. There is sometimes a cross, pellet,  $\Gamma$  or other letter there as well, and the weight of the coins is low, the solidus being about 4.2 g instead of 4.5 g. There are also half folles of Tiberius III (T. 61–2), though the specimen [494] ascribed to him by Wroth lacks the transversely held spear characteristic of this emperor's coins and more likely belongs to the second reign of Justinian II. For this there are certainly solidi [460], very light in weight (*c.* 3.8 g), and the corresponding tremisses, having a simple cross potent on the reverse, has been reduced to a quarter solidus (1.05 g). So far no coins have been recorded of Philippicus, but there is a solidus of Anastasius II (R. 1723). There, to all appearances, the series ends, for though a coin of Leo III has been reported from a Sardinian hoard it was not illustrated and may have been one of Leontius.

#### SILVER COINAGE

The silver coinage of Carthage in the seventh century is meagre. The coins have no mint-mark, but their style and fabric, as well as the provenance of many specimens, make their attribution certain. Almost all are of a single denomination weighing 0.5 g or a little more.

Three types are known for Heraclius. In all three the inscription is in the dative, or what is intended for such, as in the coinage of the Interregnum of 608–10, and an accompanying acclamation is to be understood. The types are as follows.

- I. Bust facing./VIR (upwards on l.) TVS (downwards on r.). Victory advancing l. with wreath and palm. Struck 611–13, perhaps only in 611. (T. Pl. 45.41)
- II. Two busts facing./AGV (upwards on l.) STI (downwards on r.). Cross potent on three steps. Struck 613–16, perhaps only in 613. (W. Pl. XXVII. 16)
- III. Bust facing./No inscription. Busts of Heraclius Constantine and Martina. [464]

The first two of these are very rare, and only the third is common. It was presumably struck from 615 onwards, when Martina was formally crowned Augusta, though the issue may well have been limited to a few years. The arrangement of the inscription on the first two types, straight upwards and straight downwards, is very unusual at this period. A half unit, weighing 0.25 g, having on the obverse a facing bust and on the reverse a cross and four stars, also exists.

Three types are known of Constans II, and others may yet be found.

- I. DNCONS TANTIN. Beardless bust facing./Cross potent between two pellets. Struck 641–7. [465]
- II. DNCO TA (or variant). As last, but bust bearded./PAX and pellets, with cross above. Struck presumably between 646 and 651, when the bust with long beard was introduced on Constans' coins, and probably in 647, when the rebel Gregorius was crushed and peace was concluded with the Arab government in Egypt. [466]
- III. No inscription. Two busts facing, Constans II with long beard./Busts of Heraclius and Tiberius, both beardless. Struck 659–68, probably in 659. [467]

Only one type is known of Constantine IV, of the middle years of the reign [468]. The obverse has the armoured bust of the emperor, holding a spear; the reverse has the busts of his two younger brothers. There is no inscription. It was attributed by Wroth to the mint of Rome, but certainly belongs to Carthage. There are at least two types of Justinian II, one having on the reverse a cross on steps between H and Λ (cf. Class 5 of the follis) and the other a Christogram on globe with a cross in the right field.

#### COPPER COINAGE

The copper coinage of North Africa of the mid-seventh century is abundant, especially of the reign of Constans II. The types are for the most part original. The chief denomination was at first the half follis; later, under Constantine IV and still more under Justinian II, it was the follis, now much lighter in weight, so it is clear that the general pattern of currency changes in Africa corresponded to that which obtained elsewhere. The pentanummium seems never to have been struck after Heraclius. The mint-mark, when present, was KRTG under Heraclius as under Phocas, but CRTG for most of the reign of Constans II; subsequently it reverted to KRTG (or KTG) and finally assumed a pseudo-Greek form with ΚΓΩ – i.e. Καρθάγω, the Latin word spelt with Greek letters, not the correct Greek Καρχηδών – a reflection probably of an increase in Greek influence through the efforts made by the imperial government to defend the country against the Arabs. The coins are almost without exception undated, so that their chronology is often difficult to reconstruct. It is odd that Carthage should have dated its gold but not its copper, the opposite to what was the practice in the East.

The coinage of Heraclius is practically limited to a single class, though the bust was first beardless [469], subsequently bearded [470]. A follis probably existed, but no specimens are

recorded. The reverse types of half follis, decanummium and pentanummium continued those of Phocas and the Interregnum, with an XX and €̄, and X between N and M [471], and a V between two stars respectively. The inscription is in the dative (DN ERACAI O PPAV). A rare variety of the half follis has I€̄ instead of €̄ beside the mark of value, this being presumably an indictional date (611/12). The half folles and decanumma are common and presumably were struck throughout the reign, but it is surprising that no attempt was made to keep in line with the changes of type at Constantinople. Presumably, so far as the volume of the coinage was concerned, the needs of the province were adequately met by the very considerable issues of the first decade of the century.

In addition to the regular series there is in Paris a unique half follis [472], with obverse copied from the hexagram and reverse type based on that of the semissis, which is dated Indictione VIII, i.e. 619/20.

Five classes were struck under Constans II, all of them, though not every denomination, in considerable quantity.

1. Standing figure (or bust on the decanummium) and EN TΘTO NIKΑ. Folles [473], half folles [474], and decanumma (with I) are known, the folles and decanumma being extremely rare. They can be dated 641–3.

2. DNCONST ANTINVSP (or variant) and beardless bust holding a globus cruciger, the reverse types being a cross flanked by four Xs for the follis [475], two Xs for the half follis [476], and two Vs for the decanummium [477]. Struck 643–7.

3. Similar obverse inscription and type, but the bust has a short beard. The reverse type consists of a large K between CR and TG. There is a specimen at Dumbarton Oaks overstruck on one of Class 2 (*DOC* 2, Pl. XXIX. 143). The date of issue was probably the same as that of the introduction of a bearded bust at Constantinople, i.e. 647.

4. Similar inscription. Consular bust with mappa and globus cruciger, the reverse having a cross between CT (above) and XX (below). Only the half follis is known [478]. Specimens are extremely common and show a very wide weight range; there are ones 22 mm in diameter and weighing 7 g and equally well-preserved ones 15 mm in diameter and weighing only 4 g. The type is puzzling, for consular coins were never struck at Constantinople during the reign, and though Italian charters show that Constans II assumed the consulship in 642 such a date is too early for this coinage. Nor has Constans II the long beard which was introduced on his eastern coinage in 651. Probably one should date it 648–58; the weight variations certainly suggest a prolonged period of issue.

5. The last coinage of the reign (659–68) involves Heraclius and Tiberius as well as Constans II and Constantine IV, but the different denominations vary in their designs. The follis [479] has on the obverse two standing figures and no inscription, on the reverse an M surmounted by a monogram between the standing figures of Heraclius and Tiberius. The half follis [480] has on the obverse a blundered *Constantinus* inscription

and two busts, on the reverse two busts above XX. The decanummium (W. Pl. XXXIV.3) has on the obverse two busts, and on the reverse two busts with an X between them.

Three classes of copper coins are known to have been struck under Constantine IV, but as with the final issue of Constans II the types of the several denominations differ, so that their classification has been somewhat confused. Class 2 represents coinage of large module, corresponding to that of Constantinople. The half follis of Class 3 is fairly common, the follis of extreme rarity.

1. *Follis* [481]. No inscr. Facing bust with gl. cr.; in field r., a spear and the letter T./As Class 5 of Constans II, but without mint-mark. The obverse design is an awkward conflation of types, for the emperor could not hold a globus cruciger and a spear in the same hand. The T in the field is so far unexplained; it was perhaps intended as part of a mint-mark. The issue can be dated 668–73.

*Half follis* [482]. No inscr. Three busts./KΘT monogram – the K stands equally for the emperor's name, the mark of value and the mint – between cross and star. Specimens are extremely rare, and were perhaps only struck in 673/4, the K serving also as a date.

2. *Follis* [483]. Inscr. Armoured bust with spear./M between two standing figures, KRTG in ex. Struck 674–81.
3. *Follis* [484]. Similar obverse, but of improved style./M, with cross above and mint-mark below. Struck 681–5.

*Half follis* [485]. Similar obverse./KΘT monogram.

The North African copper coinage of Justinian II's first reign is very varied in type, but specimens are rare and the details usually obscured by overstriking, so that elements in the designs of different coins are easily confused with each other. After a fairly conventional beginning on typical Carthaginian lines it develops into a series of issues almost as numerous as those of Sicily and somewhat resembling them. The coins having PAX instead of a Carthaginian mint-mark are better assigned to Sardinia than to North Africa.

The purely Carthaginian coinage forms seven classes, which fall into three separate groups according to whether the emperor is represented by (a) a beardless bust, (b) a bearded bust or (c) a standing figure. Half folles are known of three classes, and may well exist for all. Only coins of Classes 1 and 2 bear a date. The numbering below follows that of *DOC*, since the time has not yet come to establish a definitive order of issue. Some rearrangement will in the end be required, for Bendall has noted a specimen of Class 3 overstruck on Class 6. The letters accompanying the reverse types are for the most part unexplained.

- 1 [486]. Facing bust between ANNO (vertically) and II./M with KTG beneath. The corresponding half follis has a similar obverse, but an XX with cross above and P beneath on the reverse (*DOC* 2, Pl. XXXIX. 84). The P perhaps stands for PAX.

2 [487]. Facing bust./M with ΚΓΩ beneath. The half follis has a similar obverse and K, with ANNO III (both vertical) on the reverse (*BNC* Pl. LXI. AE/07).

3 [488]. Facing bust, bearded./Large M with PAX above, K beneath, and VITOR IAAGT (?) to l. and r. (most of the inscription being off-flan).

4 (*DOC* 2, Pl. XXXVIII. 32). Similar bust./M, monogram of Θ and Δ above, K beneath. The half follis resembles that of Class 1, but has a cross above and below the XX on the reverse.

5 (T. Pl. 62.81). Standing figure, monogram in field r./M, monogram above, ΗΑ to l. and r., ΚΓΩ beneath.

6 [489]. Standing figure between two long crosses on globes./M, monogram above, ΙΩ to l. and r., ΚΓΩ beneath.

7 [490]. Standing figure between two stars./M, monogram above, ΗΑΙ to l. and r., Τ(?) beneath.

The earliest folles assignable to Sardinia, and that not with certainty, have a facing bust of Justinian II corresponding to that of the solidus already given to that mint (compare [491] with [458]). The only known class of follis has on the reverse an M with crosses above and to the left and right, and PAX beneath [491]. There is a corresponding half follis, with three crosses (*DOC* 2, Pl. XXXVIII. 39), as well as another type with two of the crosses replaced by stars [492]. From Leontius onwards only half folles were struck, the reverse type being a K accompanied by an S or 2. Specimens are known for Leontius [493], Tiberius III (T. Pl. 63.61), and perhaps for Justinian II's second reign [494].

## Sicily (Pls 28–30)

### GENERAL FEATURES

The coinage of Sicily in the late sixth century had apparently been limited to the smaller denominations of copper, mainly decanummia but occasionally also pentanummia, struck at the mints of Catania and 'Sicily' (SECILIA), the latter being presumably Syracuse. The mint of Catania, identifiable by its mint-mark CAT, remained open down to Year 19 of Heraclius (628/9), and it seems clear on stylistic grounds that it produced the punches used for countermarking folles in Sicily during the middle years of the reign. Later in the century there was a mint at Syracuse, for the name is spelt out in full on Class 9 of the folles of Justinian II (CVPAKOVCI) and appears in an abbreviated form (CP) on folles of Anastasius II. The normal mint-mark, however, is SCL. The earliest issues of Constans II are without any mark at all, but can be ascribed to Sicily on stylistic grounds. Hahn's attribution of several groups of Heraclian gold coins to Sicily still requires confirmation.

The earliest regular Syracusan issues in copper can be dated to 641/2. From the same year onwards there were struck, evidently in the West, solidi, semisses and tremisses of very

distinctive style and lettering which are also characterized by a thin linear border quite different from both the pellet or rope-like border of Constantinople and the annular border of Ravenna. Wroth ascribed them to Carthage, despite the implausibility of the same mint striking such coins simultaneously with those of the characteristic North African 'globular' fabric. They are commonly found in Sicily and not in Africa, so their Sicilian origin is now universally accepted. Since the period over which they were issued coincides with that of the copper coinage with mint-mark SCL they are best ascribed to Syracuse.

Not the least striking feature of the Sicilian coinage of the second half of the seventh century is its abundance. Both in gold and copper the output of Syracuse far exceeded that of all the mainland mints of Italy put together. This phenomenon is easily explained. Although Ravenna remained the seat of the exarch it was almost completely hemmed in by the Lombards and the area over which its coins circulated was minimal. Sicily on the other hand was exempt from invasion and evidently passing through a period of considerable prosperity. Constans II's project for transferring the imperial capital to the West and his virtual settlement in Sicily in the 660s reflected a very real shift in the economic and political balance between East and West. The copper coinage of Sicily, in the last decades of the seventh century, is far commoner today than are the corresponding issues of Constantinople, and the coins are in general of higher weight and better struck. If Constantine IV's attempted reform of the follis was less spectacular in its effects at Syracuse than it was at Constantinople, the reason was in large measure that it was less needed. It is true that in the late seventh century Sicilian solidi are appreciably inferior in weight to their eastern counterparts, but this was due less to economic pressures than to the deliberate adoption of a different weight standard more closely related to that obtaining in the Germanic kingdoms of the West.

The gold coinage of Syracuse usually conforms to the pattern of Constantinople, but the copper coinage was more independent. Sometimes there was a considerable time-lag in the introduction of novel types – Catania continued the one-bust type of Heraclius to Year 13, while at Constantinople it ended in Year 3 – and Syracuse showed great originality in devising types that have no Constantinopolitan counterparts. It made much more extensive use of monograms for identifying the coins of particular emperors than was customary elsewhere, some of the forms used not being known outside the island. Though overstriking was commonly practised in the copper it was more discreetly carried out than in the East, some care usually being exercised to secure the almost complete obliteration of the preceding type. Apart from the early decanummia of Catania there are no long sequences of dated coins; the isolated dating in later years suggests that minting may have been carried out rather sporadically, at least where the copper was concerned. The gold coins commonly have letters or sigla in the reverse field or after the reverse inscription, but their meaning is unknown.

#### SOLIDI (PL. 28)

The opening of a mint at Syracuse is commonly dated to the first years of Constans II's reign, but his earliest solidi are preceded by ones having a small beardless bust of the type best



ascribed to Heraclonas. The Syracusan solidi of this emperor differ from those of Constantinople in having an I in the reverse field and a Θ, followed by three dots, at the end of the reverse inscription (W. Pl. XXXIII. 4). Although these coins have not the fine linear border later characteristic of Syracusan issues, the I and the Θ and dots are carried on under Constans II by solidi which are certainly from this mint.

Six classes of solidi were struck under Constans II. After Class I their linear borders and peculiar letter-forms, notably the horizontally elongated A, appear as clearly recognizable elements in their distinctive style. The letters or sigla in the field and after the reverse inscriptions were to some extent interchangeable; e.g. the Γ which had been in the field in Class IV is placed after the inscription in Class V, its position having been moved owing to the lack of space. This is the explanation of why it is placed vertically in relation to the design of the coin instead of following the circle of the inscription. The classes can be dated by the corresponding issues at Constantinople. Their distinctive features are as follows, the recording of the varieties of letters and sigla which occur being probably incomplete.

- I. 641–7. Beardless bust. In rev. field, I; after inscr., Θ: (R. 1511). W. Pl. XXXIII. 3, with P in field and C after inscription, may be also of Syracuse. It is in some respects anomalous, but no alternative mint seems at all probable.
- II. 647–50. Bust with short beard. In rev. field, I, Θ, or C; after inscr., ΘS, ΘI, or ΘIS. [495]
- III. 650–4. Bust with long beard. In rev. field, C; after inscr., ΘI. [496]
- IV. 654–9. Two busts. In rev. field, C, A, Θ, Γ, Γ̄, or nothing; after inscr., ΘI, ΘĪ, ΘĪ:, ΘĪ+, ΘIC, Γ, or Γ̄. [497, 498]
- V. 659–c.661. Two busts (Constans crowned) and two standing figures. After inscr., Γ, Γ̄, Γ̄, ΘΓ, or ΘΓ̄. [499]
- VI. c.661–8. Two busts (Constans helmeted) and two standing figures. After inscr., KΓ, KΓ̄, or KΓ̄; after CONOB, ∴ (W. Pl. XXXIII. 9)

The solidi of Constantine IV are of four classes, their types and dates corresponding to those of Constantinople.

- I. 668–73. Beardless bust holding gl. cr. After inscr., KC̄, KC̄:; after CONOB, ∴. [500]
- II. 674. Same, but beard added as row of dots. After inscr., Γ; after CONOB, ∴. (*DOC* 2, Pl. XXXV. 56)
- III. 674–81. Bearded bust with spear and shield. After inscr., +, ·|·, ·:·, or Θ; after CONOB, ∴ or Θ̄. [501]
- IV. 681–5. Same, but better style. After inscr., Θ or K. [502]

From Justinian II onwards only a single type was issued in each reign, normally with a bearded bust corresponding to that of the main type of Constantinople. There are occasional aberrations in the designs: some of Justinian II's solidi show him wearing a curious blanket-like cloak [504] quite different in design from the normal chlamys, while one die-sinker under

Tiberius III amused himself by placing a minute  $\tau$  b (vertically) on the emperor's right shoulder [506]. There was also a marked falling-off in weight, the solidus being normally of about 4.1 g instead of the traditional 4.5 g. The reduction, as can be seen from the irregular shapes of some of those illustrated on Pl. 28, was normally effected by clipping the edges of either the blanks or the newly struck coins before they left the mint. The solidi of Theodosius III, as well as being light in weight, seem also to have been somewhat debased, at least if their external aspect is any guide.

The recorded variants of solidi struck between 685 and 717 are as follows.

*Justinian II*, first reign. In field, nothing, Z, H,  $\Theta$ , K, or \* K; after inscr.,  $\Theta$ ,  $\Theta$ , K, or  $\epsilon$ . [503, 504]

*Leontius*. In field, nothing,  $\cdot\cdot$ , I, \*, or  $\Theta$  beneath steps of cross; after inscr.,  $\delta$ ,  $\Gamma$ ,  $\epsilon$ ,  $\Theta$ , or  $\Theta$ . [505]

*Tiberius III*. In field, nothing, + +, A, IP, HA, HAP, or CI; after inscr., nothing, pellet, nothing, pellet,  $\cdot\cdot$ ,  $\Gamma$ P,  $\Theta$   $\cdot\cdot$ , C, P, or \*. [506, 507]

*Justinian II*, second reign (alone). In field, P; after inscr., \*.

*Philippicus*. In field, nothing, P; after inscr., nothing, \*. [508]

*Anastasius II*. In field, P, after inscr., \*.

*Theodosius III*. In field, P; after inscr., \*. [509]

#### SEMISSSES AND TREMISSSES (PL. 28)

The semisses and tremisses of Syracuse show the same stylistic features and peculiarities of lettering as are found on the solidi. The imperial busts are always in profile, remaining so even after the introduction of facing busts under Justinian II for the corresponding denominations in the East. The general design of the bust, on which the diadem has merged with the hair as two long dotted lines and the shoulders are unusually square in section, is very characteristic of the series. Once the pattern had developed it scarcely varied from reign to reign, so that the correct attribution of the later issues is often difficult when, as frequently occurs, the emperor's name in the inscription is off-flan or otherwise illegible. The cross potent of the reverse types is unusually tall and slender when compared with that of Constantinople. The inscriptions on the semisses and tremisses of Constantine IV are the same as those on coins of Constans II, and if it were not for the correspondence between the letters in the field or after the inscription with those of the solidi it would usually be impossible to distinguish between the coins of the two emperors.

The variants of the semisses and tremisses at present known are as follows, though the list is no more than provisional. It is probable that all letters or sigla occurring on either semisses or tremisses will eventually be found for both denominations.

#### *Constans II*

*Semissis*. In field, I, C, nothing, F, or C; after inscription,  $\Theta$ ,  $\Theta$   $\cdot\cdot$ ,  $\Theta$ I,  $\Theta$ I, C, ICK, or pellet. [510]

*Tremissis.* In field, I, Θ, CЄ, C, C·, A, Γ, Γ·, or 4; after inscription, Θ, Θ·, Θ··, ΘI, ΘI·, I, ζ, Γ, C·, CI·, IC·, or nothing; after CONOB, ∴ [511, 512]. There is also a tremissis with P in field and C after inscription corresponding to the solidus alluded to above, p. 131, the attribution of which to Sicily is uncertain.

*Constantine IV*

*Semissis.* Not known.

*Tremissis.* In field, Γ· or nothing; after inscription, pellet or ·I·; after CONOB, ∴ [513]

*Justinian II, first reign*

*Semissis.* In field, nothing, Z or K; after inscription, Θ, Θ or nothing. [514]

*Tremissis.* In field, nothing, H, K, or K·; after inscription, Θ or nothing. [515]

*Leontius*

*Semissis.* Not known.

*Tremissis.* In field, nothing.

*Tiberius III*

*Semissis.* In field, nothing, A, HΛ, or CI; after inscription, nothing, Θ or ΓP. [516]

*Tremissis.* In field, nothing, A, HΛ, or ΓP; after inscription, nothing or ΓP.

*Justinian II, second reign*

No fractional gold recorded.

*Philippicus*

*Semissis.* In field, nothing; after inscription, \*.

*Tremissis.* As semissis.

*Anastasius II*

*Semissis.* Nothing in field or after inscription.

*Tremissis.* Not known.

*Theodosius III*

No fractional gold known.

### COPPER COINAGE (PLS 29, 30)

The Sicilian copper coinage of the Heraclian and post-Heraclian periods is one of the most remarkable in Byzantine numismatics. It began modestly with dated decanummia and undated pentanummia of Catania, struck on the same pattern as those introduced in 582. The issue lasted down to 628/9, overlapping with an equally unusual series of countermarks which date in part from c. 620 and in part belong to the 630s. These were followed, after the opening of a regular mint at Syracuse, by an astonishingly varied series of copper coins, mainly folles but with a few half folles and decanummia, whose types were changed every few years and which were often quite original, owing nothing to the contemporary coinage of Constantinople. Six distinct types were issued under Constans II and five under Constantine IV, while variety reaches its climax under Justinian II, for whom there are fourteen distinct classes in a reign which lasted in all for only fifteen years (685–95, 705–11). After 695 there

seems to have been some slackening in the inventiveness of the mint, though since the coins are rare new varieties may still come to light. Coins are known for all the emperors, though a specimen of Philippicus' follis has only recently come to light and for the moment seems to be unique. Inscriptions disappear after the reign of Constans II, the coinage of each subsequent emperor being identified by his monogram placed above the mark of value on the reverse.

The earliest of these coinages, the decanummia and pentanummia of Heraclius struck at Catania up to and including Year 19, can be dealt with briefly. The reverses of the decanummia are of the traditional type, with mark of value I, the date, and the mint-mark CAT. It is not clear whether they were being struck during the first years of the reign, for those dated Years 1–6 which have been attributed to Heraclius are for the most part coins of Maurice; a specimen of Year 3 in the Hermitage, however, seems to belong to Heraclius. For Years 7–13 there are coins of Heraclius with a bearded bust [517, 518]. Here confusion with Maurice has sometimes occurred, since the inscriptions are rarely legible in their entirety, but the flat crown, the beard, and the general shape of the head are all distinctive features of the Heraclian issues. The coins with two busts run from Years 14 to 19, Heraclius always having a short beard [519]. No significance can be attached to the delay of nearly ten years in recognizing the association of Heraclius Constantine as co-emperor; the lower denominations of the copper often paid little attention to dynastic changes of this character. The pentanummia, with a facing bust and on the reverse a V between stars and pellets, are undated, but have the usual mint-mark CAT.

The countermarked Sicilian coins of Heraclius form three series, and are unusual in that there is both an obverse and a reverse countermark. These match each other in both position and die axis – they are always  $\uparrow\downarrow$  – and were evidently imposed by striking between the jaws of a pincer-like instrument of the same pattern as the boullotiria used for impressing lead bullae. They are as follows.

I [520]. Bust of Heraclius with short beard and monogram  $\text{H} \cdot \text{SCL}^s$ , with stroke above, the small s being an abbreviation mark and not a letter. Normally found overstruck on folles of Anastasius, Justin I and the early years of Justinian (527–39) with profile bust, which usually weigh between 12 g and 16 g. The countermarks are only rarely found on later coins with facing bust, but the exclusion of these may be in part accidental. Most of the coinage of the island is likely to have consisted of folles introduced by Byzantine troops under Belisarius when they invaded the island a hundred years earlier, in 535, and first brought it within the bounds of the Byzantine currency system. The countermarks are usually carefully placed so that the  $\text{SCL}^s$ , which was evidently thought of as a mint-mark, replaces the CON or other mint-mark of the original coin.

II [521]. Two bearded busts, Heraclius with short beard./Similar to no. I. These countermarks are always found on the heavy 'reformed' folles (c. 9–11 g) of Constantinople of 629/30 and 630/1. The type is another example of the slowness of Sicily in following the example of the East, where by this date the emperor was shown with a long

beard. No attention was paid to the exact placing of the countermarks, which may occur anywhere on the coin.

III [522]. Two busts, Heraclius with long beard./ $\text{H}$  and  $\text{SC}^s$  with stroke above. These occur on folles of the 630s, sometimes on ones already countermarked by II, but more usually on later coins (down to Year 26 recorded), sometimes cut down and weighing as little as 5–6 g. The countermarks are placed anywhere on the coins.

Most of the usual explanations for countermarking – raising the value of coins, prolonging their period of life, and so forth – can scarcely apply to these ones of Heraclius. A possible explanation of the first group is that they form part of an attempt by the government to acquire metal by calling in old folles, countermarking and returning into circulation the worn ones with profile bust, and retaining the heavier coins of the mid-sixth century for melting. Another possible explanation is that coins with profile bust were circulating at a discount, and by stamping them with a facing bust the government hoped to raise them to their full value. The date of the first countermarking cannot be fixed precisely, but the facing bust of Heraclius alone continued to be used at Catania until 622/3 and it may well have been *c.* 620. The dies were presumably made at Catania but distributed for use in market centres throughout the island; this would be the only satisfactory way of dealing with coinage actually in circulation. The other two countermarks must be of *c.* 631 and 638. The main groups of coins on which they were imposed evidently form major consignments from Constantinople and were marked in this way before being put into circulation, presumably because, as a result of the first crop of countermarks, only countermarked coins were thought of as forming legal tender in the island. The cutting down of the coins on the latest issue brought them into line with the lowering of weight standards elsewhere. The countermarks of Class II were evidently made by workmen trained in the Catanian mint, though whether the countermarking was carried out at Catania or at Syracuse we cannot say. The third countermarking, which has  $\text{SC}^s$  instead of  $\text{SCL}^s$  and busts of a quite different style, was probably carried out at Constantinople.

The earliest issue of folles on which  $\text{SC}^s$  forms part of the original design [523] corresponds to Constans II's Constantinopolitan folles of Class 2 bis, which are dated Year 3. They have on the obverse a large facing bust and the inscription  $\text{INPERI CONST'}$ . On the reverse is an *Ananeo'* inscription, an enormous  $\text{SC}^s$  mint-mark which has crowded the mark of value ( $\text{M}$ ) into a comparatively small area of the field, and an officina letter (A–E, or sometimes a cross) to the left of the  $\text{SC}^s$ . The style is identical with that of Constantinople and quite different from that of the later Sicilian folles. This fact, combined with the use of officina letters, which otherwise never occur in Sicily, makes it likely that the coins were struck in Constantinople for use in the island and cannot be directly attributed to Catania or Syracuse. The huge  $\text{SC}^s$  is a kind of imitation countermark, corresponding to that of the last issue of Heraclius' reign.

The six classes of Constans II's folles subsequently struck in the island are illustrated on Pl. 29. The first two are without mint-mark, but the style, and the fact of their being

frequently overstruck by later Sicilian issues, leaves no doubt as to their place of origin. The coins are in general larger and heavier than the folles of Constantinople. Why a facing bust without inscription was preferred to the Constantinopolitan standing figure and *En touto nika* inscription is impossible to determine. Only Class 4 bears a date, but the chronology of the others fits into the general solidus pattern of the reign. The essential elements are as follows.

1. 644–8. Beardless bust. [524]
2. 648–51. Bust with short beard, at first taking the form of a row of dots. [525]
3. 651–2. Bust with long beard. [526]
4. 652/3. Standing figure with long beard, dated INΔ(ictione) IA. [527]
5. 653–9. Standing figures of Constans II and Constantine IV. [528]
6. 659–68. Same, but with standing figures of Heraclius and Tiberius on the reverse. [529]

Fractional coins were struck only occasionally, and are dated ostensibly by regnal years, but it has been shown by Bendall that *Anno* was being used in the same sense as *Indictione* and that the dating is indictional throughout. The classification of *DOC* 2, 415, must in consequence be modified as follows, with the proviso that further classes may yet come to light.

1. Dated AN(*no*) Z = 648/9. Bust with dotted or normal beard. Only half follis known. [530]
2. Dated AN(*no*) I = 651/2. Bust with long beard. Both half folles [531] and decanummia [532].
3. Dated ANNO Δ = 660/1. Bust with long beard. Half folles (*DOC* 2, Pl. XXXI. 184) and decanummia.
4. Dated ANNO Z = 663. Bust with long beard. Only decanummium known (DO).

Five classes of folles, all of them common, were struck under Constantine IV, three of them with facing busts and two with standing figures. Class 1, with beardless bust [533], can be dated 668–74. Classes 2 and 3 [534, 535] belong to 674–81 and Classes 4 and 5 [536, 537] to 681–5, but the precise dating of each class and the reasons for the changes in type are uncertain. The fractional coinage is very rare. The earliest type of half follis (Spahr 185) is copied from Class I of Constantinople and can be dated to 673/4; the mint is indicated by SCL beneath the mark of value, but the die-sinker has absurdly left in place the CON of the model which he was copying. The other two classes, one with a facing bust holding a globus cruciger (*DOC* 2, Pl. XXXVI. 66) and the other a three-quarter facing bust holding a spear [538], are both dated ANNO Δ, but this is simply a repetition of the inscription on the last coinage of Constans II and cannot be construed as a real date.

It was in the reign of Justinian II that the proliferation of different types in the Syracusan mint reached its culminating point. Some of them are rare, as one would expect from their

short periods of issue, and the order of striking, and even their distribution over Justinian's two reigns, is still not fully established. The sequence followed below is that of the Dumbarton Oaks catalogue, which in its turn is only slightly varied from that given by Ricotti in his study of the Byzantine coinage of Sicily. It certainly does not represent the order of issue, but it seems better to leave it unchanged for convenience of reference, rather than to introduce minor corrections which in the present state of our knowledge can only be temporary in character. References to other sources are given for such types as are not illustrated here. There may be some minor errors in the descriptions, since details on the actual coins are often obscured by overstriking. Details of the reverse types, whose basic element is always an M with the monogram of Justinian above and SCL beneath, are only given when they present some particular feature of interest. A novel feature in many of the designs is the presence of a small plant, presumably intended as a palm branch, in the field. Its meaning is unknown.

1. Facing bust holding gl. cr. and akakia. [539]
2. Facing bust wearing blanket-like chlamys (see p. 131) and holding gl. cr. (*DOC 2*, Pl. XXXIX. 54.2)
3. Facing bust holding gl. cr. and akakia, star and branch in r. field. (W. Pl. XXXIX. 12)
4. Facing bust holding gl. cr., large globule in r. field./S (sometimes reversed) beneath the M, star to l. and r. The S is possibly a date (Year or Indiction 6). (*DOC 2*, Pl. XXXIX. 56)
5. Facing bust holding gl. cr. and akakia./Δ beneath the M and cross to l. and r. The Δ is possibly a date (Year or Indiction 4). (*DOC 2*, Pl. XXXIX. 57)
6. Emp. standing, wearing tight chlamys. [540]
7. Emp. standing, holding long cross and akakia./€ beneath the M and star to l. and r. The € is perhaps a date (Year or Indiction 5). (W. Pl. XXXIX. 14)
8. Emp. standing, holding cross potent on steps in r. hand; gl. cr. in l. This class must be later than 692, since the obverse type is based on that of Class III of the solidus of Constantinople. (*DOC 2*, Pl. XXXIX. 60)
9. Emp. standing, holding spear and gl. cr.; plant in field r./CVPA KOVCI (vertical) to l. and r. of the M. [541]
10. Similar type, but no plant in field and no rev. inscr. (*DOC 2*, Pl. XXXIX. 62)
11. Emp. standing, star and plant to l., plant to r./M between INΔ and +Δ+ (vertical), i.e. 694/5. [542]
12. Emp. facing, star in r. field./Plant to l. and r. of the M. [543]

In addition to these folles, there is a rare half follis (T. Pl. 62. 90) having on the obverse a facing bust and on the reverse a K with the now traditional +AN NO[Δ]. Only the lower part of the monogram on Tolstoi's specimen is visible, but it is clearly an A and not the Θ of Constantine IV's ⚡. This coin represents the last half follis to be struck at Syracuse during

this period. Henceforward, for nearly a century, the copper output of the mint was limited to folles.

Under Leontius and his successors the number of types issued by each emperor declined, not more than two being known for each reign and most of them being very rare. For Leontius there are folles with a facing bust and a 'bar' monogram above M (Spahr 238) and others with a standing figure and a cross above M [544]. The attribution of the first class is not quite certain, for the portrait has not the usual rounded face of Leontius, but the monogram includes the letters ΛCONTIOV and no other attribution seems possible. The form of the 'cross' monogram of Class 2 is variable, the N being sometimes placed centrally instead of on the right or left of the vertical stroke. Tiberius III also struck two classes, one with a bust [545] and the other with a standing figure [546]. The design of the latter was evidently suggested by Class 2 of the Constantinopolitan folles, though the details are not identical.

For Justinian II's second reign there are folles for his brief period of sole rule (705) and for that of his association with Tiberius. The first have his bust holding a cross potent on steps and a globus surmounted by a patriarchal cross (Spahr 275–6); the second have the facing busts of the two emperors (Spahr 277). What may have been a coin of Philippicus was shown some years ago at the British Museum, but the monogram on the cast that was made is not clear and the identity of the coin is uncertain. For Anastasius II there are two classes, one with a facing bust (Spahr 290) and the other with a standing figure; it is this which has the M flanked by C and P (for CVPAKOVCI), the letters being clearer on Spahr's specimen (Spahr 291) than on that illustrated here [547]. Finally, for Theodosius III there are again two types, both with a facing bust. On one the emperor holds a globus with patriarchal cross [548], on the other (Spahr 293) he holds a spear. The latter is an unexpected type for Theodosius III, but the monogram is clear.

## Italy (Pls 31–3)

### GENERAL FEATURES

In 610 a substantial part of mainland Italy was already occupied by the Lombards, but Ravenna and the Pentapolis, much of Tuscany and the Campagna, and a substantial part of the south still remained in Byzantine hands. In the course of the following century these areas were greatly reduced, and most outlying possessions such as the Ligurian coastline were lost. The only Byzantine mints that can be identified with certainty were Ravenna, Rome and Naples, the first two carrying on from the sixth century and the third being opened in the 660s, but there exist substantial numbers of gold coins which do not fit into the pattern of these three and were presumably minted elsewhere. The gold coinage in general, consisting



almost entirely of solidi and tremisses, tended to copy that of Constantinople fairly closely. The silver remained independent in type, with very small coins weighing *c.* 0.5 g as in the preceding century, and the hexagram never came into general use. Copper was struck in some quantity under Heraclius, but thereafter there was very little, and weights were low. Ravenna issued mainly folles and half folles and Rome half folles and decanumia, though from Justinian II onwards it developed a coinage of 30-nummus pieces marked XXX which were carried on under the Isaurians. The total output of the Italian mints was inconsiderable throughout the century, and declined in both quantity and quality in its second half.

The mint attributions of the copper coins usually raise no problem, since they bear such mint-marks as RAV, ROM and NE. The silver coins of Rome, which apparently only began under Constans II, have the mint letters RM worked into the reverse type, apparently to distinguish them from the already existing coins of Ravenna. The most characteristic feature of the latter is the frequent use of the emperor's initials or part of his name on the reverse (ΦK for Phocas, HP or HR in monogram for Heraclius, CON for Constans II, CON and K for Constans II and Constantine IV, KHT for Constantine IV, Heraclius and Tiberius, L for Leontius, T for Tiberius III). The mint attributions of the gold are for the most part traditional, since there are no mint-marks, and may have to be drastically revised in the future.

One exceptional solidus [559], of the general Mezezius (Mzhez) who was proclaimed emperor at Syracuse after the murder of Constans II (668) and was captured and executed after only a few months 'reign', deserves particular mention. It is one of the few Byzantine coins to have been struck by an unsuccessful usurper, and it shows that Mezezius proposed to retain his Armenian name instead of changing it into something more acceptable to Greek ears, as his fellow-countryman Vardan (Philippicus) was to do half a century later. Several specimens of the coin are known, but it was unrecognized and regarded as the crude product of some south Italian or Balkan mint until one with a clear inscription (ΔΝ ΜΕΖΕΖ ΙΨΣΡΡΑΥ) came on the market in 1978. Its style and lettering are Constantinopolitan, and not Syracusan as one would expect, so presumably it was struck at the usurper's headquarters in Sicily or south Italy with the help of older Constantinopolitan reverse dies.

The standard works on Byzantine numismatics omit the supposed seventh-century coins of Luni, a seaport on the west coast of Italy near La Spezia, but they are at least deserving of mention. The 'coins' are of very base metal, largely lead, which have been found in some quantity in excavations on the site, and bear monograms or letters of which some have been interpreted as the names of various bishops of Luni. Specimens were first published in 1918 by a local antiquary, U. Mazzini, who supposed them to represent a municipal coinage struck while the town was still in Byzantine hands in the late sixth and early seventh centuries. Although they bear some resemblance to the local coinage of Cherson which will be described later (pp. 187–8), they differ from this in not being in any sense 'imperial', with easily identifiable monograms or busts of Byzantine emperors such as are found on the

Cherson coins. Since their original function is conjectural and they were not issued by a regular mint, they cannot reasonably be included in a work on Byzantine coinage.

In view of the very varying patterns of activity in the different mints, it is best to describe the coinage by mints rather than by reigns.

#### RAVENNA

Ravenna, the capital of Byzantine Italy, remained important as a mint through the reign of Heraclius, but the contraction of Byzantine territory in the north reduced its importance in the second half of the century.

The solidi of Heraclius are characterized by the highly schematic and linear treatment of their obverse types and their deep annular borders, though since the obverse die-faces were regularly much larger than those of the reverses, the borders are much more conspicuous on the latter. The attribution of the coins to Ravenna is customary, but since the fabric is closely copied by the pseudo-imperial Lombard coinage of Tuscany one may suspect that some of the coins of at least Class III were struck at Rome. The reverse inscription usually ends with H, an immobilized 'date' carried over from Phocas' reign. Five classes exist, but some of the first may be of Thessalonica, not Ravenna.

- I. 610–11. Helmeted facing bust, sometimes with pendilia, having PCRP in inscription./Cross potent on steps, inscr. ends H or Λ. [312]
- II. 611–13. Similar, helmet always with pendilia, PP in inscr. Rev. inscr. always ends H. [549]
- III. 613–29. Two busts facing, Heraclius Constantine with short beard./Same type, usually with H [550], rarely P or B. There is much variety, with steadily growing formalization of the chlamys pattern.
- IV. 629–31. Two busts, Heraclius with long beard. Inscr. ends H, P [551], T or TR.
- V. 632–41. Three standing figures, Heraclonas usually uncrowned. Inscr. ends H [552], Γ, S, TOI or TOR. Extremely rare, in contrast to the coins of the preceding two classes, as if Ravenna were ceasing to mint gold in the 630s.

The semisses (T. 25) and tremisses, with profile busts, are characterized by annular borders and PERP (Class I [553]) or PP (Class II) in their inscriptions.

Extremely rare hexagrams of western style and lettering [323] are generally attributed to Ravenna (see p. 104), but they formed no part of the regular coinage of Italy. The regular silver coins were small silver coins of the traditional Italian type, perhaps worth 120 nummi or 3 folles. There are both 'monogram' and 'cross' types, the monogram being either a HP ligatured (Class Ia [345]) or HR and a cross (Class Ib: W. Pl. XXIX. 20), the 'cross' type having a cross, sometimes accompanied by two stars, as reverse type [346].

There are six classes of follis and half follis, apparently only occasionally struck and

nearly always dated, and rare undated decanummia. A half follis having as reverse type a large K between R and A, with VENN beneath, is a forgery of Cigoi.

1. 611–13 (only Year 2 recorded). Bust facing, Xs as mark of value. Follis (like that of Phocas [589]), half follis, and undated decanummium.
2. 613–16 (only Year 6 recorded). Same, but two busts facing. Follis (Copenhagen) and undated half follis [597].
3. 616–17 (only Year 7 recorded). Two busts facing, but M and K as marks of value. Follis [590] and half follis (W. Pl. XXX. 5). The substitution of M for XXXX left space available for an officina letter, which took the form of a meaningless A, subsequently modified into a Δ (under Constans II) or a θ (under Constantine IV).
4. 617–30 (Years 7, 8, 13 and 16 recorded). Three busts facing, that of Martina usually very carefully designed. Reverse types M [591] or K (W. Pl. XXX. 7) for the follis and half follis respectively, with the latter in Year 16 combined with H as a monogram (Berlin). The corresponding decanummium has on the obverse three busts and on the reverse an X between R and A, with VEN in the exergue (Vienna), and the pentanummium has a profile bust and a Christogram between R and A (W. Pl. XXX. 11).
5. 630–2 (Years 20, 21 and 22). Two standing figures, Heraclius wearing armour. Folles [592] and half folles [598].
6. 633–41 (Heraclonas uncrowned, Years 23, 24, 25, 26; Heraclonas crowned, Years 28, 30). Three standing figures, with prominent monogram above mark of value. Folles [593] and half folles. Decanummia with three helmeted busts are of Constantine IV.

Solidi with a helmeted bust are known of Heraclius Constantine, the reverse inscription ending in Λ [555]; there is sometimes an Ε in the reverse field. There are ‘small bust’ solidi of Heraclonas, of very rough fabric, with reverse inscriptions ending H, C or I [556], and perhaps some tremisses [554], though these may really be coins of Constans II.

The Ravennate coinage of Constans II is meagre. The only solidi given to him in *DOC* 2 are better attributed to Rome, since they share the K in the field and the terminal Γ on the reverse which occur on the Rome solidi of Heraclonas. Some have a beard added in the form of a row of dots, like the later issues of Class I of Constantinople. There is also a rare consular hexagram (T. 264), two classes of small silver coins with CON [347] variously arranged in the field and sometimes joined with a K for Constantine IV [348], and folles dated Year 4 and 24, with half folles dated Year 4 [599].

Italian gold of Constantine IV is fairly common, and solidi and tremisses are often linked by the presence in the reverse field of the same letters, either alone [564] or accompanied by pellets [567] or in monogram with a cross [558, 561, 565, 566, 568], or through having a cross or a group of pellets at the end of the reverse inscription [560, 562, 563], but their separation between Ravenna and Rome cannot be determined with any assurance. There are small silver coins of Ravenna, however, with K, H and T (for Κωνσταντῖνος, Ἡράκλειος, Τιβέριος) in the reverse field [349], and folles were struck on several occasions. Class 1

(674–81) has on the reverse an M between the standing figures of Heraclius and Tiberius [594], so that the date is placed above the M, Years 22, 25, 26 and perhaps 27 being recorded. Class 2 eliminates the emperor's brothers, so that ANNO and the year can be placed in their normal positions, while a figure for the indiction is placed above the M. The two dates recorded are Years 30 (with Indiction 11) and 31 (with Indiction 12). An early coin (T. 81) is also dated Z, perhaps Indiction 7. The only half follis known is dated Year 30 or 31. There is an early, undated decanummium (T. Pl. 59.92), wrongly attributed in *DOC* 2, 380/310, to Heraclius.

The only Ravennate coins of Justinian II's first reign are rare solidi [569] and tremisses [570], with various letters in the field or after the reverse inscriptions, and folles. For Leontius there are solidi [571], tremisses showing him holding a globus cruciger [572] or an akakia, small silver coins with an L beneath a cross with a star in each quarter, and folles and half folles. For Tiberius III there are solidi and tremisses, with M or Θ in the reverse field or at the ends of the inscriptions [573, 574], small silver coins like those of Leontius but with a T instead of an L (T. Pl. 84.14), and folles [595]. For Justinian II's second reign there are folles dated Year 21, some with Justinian alone [596] and others showing him associated with his son.

No coins are known of Philippicus or Theodosius III, but for Anastasius II there are solidi (W. Pl. XLI. 19) and folles, the latter dated Year 3. All the coins, from the end of Constans II's reign onwards, are very rare.

#### ROME

Heraclius' coinage of Rome, assuming that some of the Ravennate gold does not really belong there, is limited to small, ill-struck half folles and decanummia. The half folles form three classes: Class 1 (613–c. 620) with two facing busts – there is sometimes a cross between them – and XX as mark of value [600]; Class 2 (c. 620–9) with three facing busts, K as mark of value, and a date (Years 12, 13, 14, 15 [601] recorded, the V of 5 having the form U); and Class 3 (629–41) with two busts again and a very fragmentary inscription [602]. The decanummium has a facing bust and X [603], but its attribution to Rome is conjectural, since it lacks the ROM mint-mark of the half follis.

'Small bust' solidi of Heraclonas which lack the annular border of Ravennate coins but are certainly western have been assigned to Rome (*DOC* 2, Pl. XXIII. 10). The reverse inscriptions end with Γ, often having the form C, and they have K in the field. There are similar coins of Constans II, with short beard [557], and accompanying tremisses, but their borders are Ravennate. The attribution of the late solidi and tremisses is uncertain, as noted already. In silver there are tiny coins showing Constans either short-bearded or long-bearded [350], and having on the reverse RM and a cross and star. There are also four classes of half folles and decanummia, only the half folles having a mint-mark.

1. 645/6. Beardless bust./K and date (Year 5).
2. 646–50. Bust with a short beard./XX. [604]
3. 650–4. Bust with long beard./XX. [605]
4. Two busts./XX vertically between busts of Heraclius and Tiberius. [606]

The decanummia have on the obverse either a beardless or a long-bearded bust, and the latter on the reverse an X between I and M (or M and I), this being copied from the NM (for *nummi*) of earlier African coins. The general appearance of the coins, however, is Italian and not African.

The precise attribution of Constantine IV's gold coins is again doubtful. His small silver coins, which have sometimes been ascribed to Heraclius or Constans II, have as reverse type a monogram of RM combined with a cross, and sometimes a star in the field. His earliest class of half follis [607] derives from the last issue of Constans II. The bust on the later coins (Class 2) holds a spear [608], and the coins are often of very crude workmanship [609], while on coins of Class 3 Heraclius and Tiberius are absent.

Justinian II's coins of Rome consist of solidi and tremisses [575, 576], silver coins with a cross and RM [351], and billon 30-nummus pieces with XXX [610]. Since there is by now no obverse inscription the latter have been attributed to a variety of rulers, but it is here that they best fit. Similar coins exist for Leontius [611] and some later rulers, and similar folles for Tiberius III. Under Leontius, further, the minting of gold was revived, and there is thenceforward a series of issues under Tiberius III (for whom there is even a half tremissis), Justinian II restored [577], Philippicus, Anastasius II [578–80], and Theodosius III [587], leading on to the abundant if extremely debased Roman 'gold' coinage of the Isaurians (see pp. 169–70). The coins of Anastasius II and Theodosius III can be ascribed to Rome with certainty, for they closely resemble those of Leo III and in some cases share the same sigla. That of some of the earlier ones is doubtful, and the sigla in the field are still without any satisfactory explanation.

#### NAPLES

The mint of Naples dates from late in the reign of Constans II, possibly from the emperor's passage through the city in 663 on his way from Rome to Sicily. As at Rome, the chief issues consisted of half folles with XX and a mint-mark. Since there are no obverse inscriptions their attribution to individual emperors is not always clear, but the long-bearded bust of Constans II is unmistakable and the transition from circular to square flans helps with the others. The coinage of half folles lasted from c. 663 to c. 695, nothing later than Justinian II being known.

The solidi attributed to Naples are of poor quality gold, slightly green in colour, and are of distinctive fabric, somewhat resembling that of the slightly later ducal coinage of Benevento. The earliest ones, of Justinian II [581], Leontius [582], Tiberius III [583], and Justinian II

restored [584], are mainly recognizable by their fabric, but those of Anastasius II [585, 586] and Theodosius III [588] are also linked by having a star in the reverse field. This feature also occurs at Rome, a mint with which that of Naples was always closely linked.

### Arab-Byzantine coinage (Pl. 34)

The Arab-Byzantine coinage of the seventh century resembles in its origins the pseudo-imperial coinage struck by the Germanic peoples who had occupied the western provinces of the Empire in the fifth and sixth centuries. In both cases the new rulers found it natural to begin by striking coins resembling those already in circulation in the regions they occupied, and tradition alleged that Mohammed took credit for having left to the conquered peoples their traditional weights and measures: to Iraq its *dirhem* and its *qafiz*, to Syria and Egypt their *dinar* and their *mudd* and *ardib* respectively. The names of Arab coin denominations were purely derivative: *dinar* was a loan-word through Syriac from *denarius aureus* and *fels* (pl. *fulūs*) from *follis*, while *dirhem* came through Pehlevi ultimately from the Greek *drachma*. But Arab-Byzantine coinage differs from German pseudo-imperial coinage in three important respects. In the first place, it was mainly a coinage of copper, while the Germanic coinages were almost exclusively of gold. Secondly, it was very largely municipal, the coins usually bearing the names of the places where they were minted but no name of a ruler. Finally, the Arabs brought with them a religious prejudice against representational art which led to various modifications in the traditional Byzantine types and ultimately to the complete abandonment of these in favour of the purely epigraphic designs which characterize the vast bulk of Islamic coinage. There was, however, a brief intervening stage between the two, when the Caliph 'Abd al-Malik (685–705) experimented with figured issues of a non-Byzantine character. It was only in the face of the protests these aroused that the final step towards a purely epigraphic coinage was taken.

An account of Arab-Byzantine coinage, which must largely be based on Walker's splendid catalogue, can most conveniently begin with the copper, not with the gold, since although it is undated the general view, which I believe to be correct, is that it started much earlier in the century. Silver can be left out entirely, for the hexagram, which seems to have circulated on only a limited scale in Syria, Palestine and Egypt, was never copied, and the transitional silver issues of the caliphate are not Arab-Byzantine but Arab-Sassanian, imitated from the thin flat dirhems of the Persian Empire but distinguished from them by having a religious text or a governor's name, usually in Arabic but sometimes in Pehlevi, on their outer borders. Egypt can also be omitted, for although the Arabs certainly struck copper coins in abundance in the middle and later decades of the seventh century, these are simply blundered imitations of the latest Heraclian or Constantinian issues and have no specific Arab inscriptions, as do those of Syria and Palestine on the one hand and those of North Africa on the other.

The way for the proper Arab-Byzantine coinage of Palestine and Syria was prepared by a relatively rare issue from Beit-Shean (Beth-Shan), the ancient Scythopolis south of the Lake of Galilee, the metropolis of central Palestine. It consists of folles and half folles copied from Nicomedian issues of Justin II, which for some unknown reason were unusually common in Palestine, the name of the city (CKVΘO ΠOΛHC or CKV ΘO) accompanying the seated figures of Justin and his wife Sophia [613, 614]. Independent imitations of these folles with very crude designs and much blundered inscriptions also occur [612], these being sometimes found stamped with Arab countermarks meaning 'good'. These blundered versions have been influenced by the folles of Antioch, for the officina letter is Γ (which did not occur for Nicomedia) and the date is \*XII, i.e. XXII (which did not exist for Justin II's reign); also the figure of Justin II bears a globus cruciger instead of duplicating that of Sophia (as on Scythopolis coins) with a transversely held sceptre. These various coins, of which specimens were first published only in 1938, are customarily assigned to the early Arab period, but their relatively high weight (c. 10 g), the existence of a half follis, and the absence of a specifically Arab inscription suggest that they are better assigned to the period of the Persian occupation in the 620s. The type remained popular, however, for after the introduction of the 'standing caliph' type at the end of the seventh century an adaptation of it was produced having on the obverse two standing figures with swords and between them a spear on steps, while on the reverse the mark of value is accompanied by an Arabic inscription with the name of 'Abd al-Malik [615].

The main groups of transitional copper came from the four towns of Hims (Emesa), Baalbek, Damascus and Tiberias, the choice of mints being typical of the land-oriented empire of the caliph. Only some relatively rare issues from Tortosa (Tartus) were struck at any port on the Mediterranean. The reverse types are an M or MN, accompanied by the name of the mint or by the word for 'good' in Greek or Arabic and usually by some decorative elements such as stars or blundered monograms or letters. There are five varieties of obverse type.

(a) Three standing figures, the style of which shows the model to have been the Cypriote issue of Heraclius of Years 17–19 [432, 433]. This type is especially characteristic of Tiberias [616], the mint name in both Greek and Arabic being placed on the reverse (TIBEPHAAOC, *Tabariya*). There are also rare specimens with no specific mint-mark, and some, evidently struck in Persia, with Pehlevi inscriptions.

(b) Facing bust wearing crown and chlamys, copied from the solidus of Heraclonas or the early issues of Constans II and in any case of the 640s. The chlamys and the design of the crown and hair show that the model cannot have been an early follis of Heraclius, as Walker believed. This type is mainly characteristic of Emesa, but occurs also on the coins of Tortosa (Walker, Pl. V. 55, 56). The coin illustrated here [617] is one of Emesa, with inscriptions reading on the obverse KAAON (i.e. καλόν, 'good') in Greek and 'in Emesa' in Arabic, and on the reverse EMICHC (i.e. 'Emesa') with 'good' in Cufic script underneath.

(c) Seated figure holding transverse sceptre and globus cruciger. This has no exact

Byzantine prototype, but may have been created by isolating one of the pair of seated emperors on the common hexagram of Heraclius and Heraclius Constantine and taking over the transversely held sceptre from the seated figures of Justin II and Sophia. It was used only at Damascus [619], the seated figure having on the left a bird above a T and on the right the personal name ΛΕΟ. Whether the latter refers to an individual, or is a chance combination of letters, is an unsettled question. The reverse has an M between the remains of a date (ΑΝΟ ΧϢΙΙ), with ΔΑΜ as a mint-mark in the exergue. Despite the absence of a Cufic inscription the size and general aspect of the coin leave no doubt that it belongs to the early Arab period, not to that of the preceding Persian occupation. Blundered variants, with Μ instead of M on the reverse, are also known.

(d) Standing figure holding long cross and globus cruciger. The model is here the beardless standing emperor on the *En touto nika* coinage of the first decade of Constans II's reign. It was the main type used at Damascus, the mint being sometimes identified only in Greek by ΔΑΜ in the exergue of the reverse [620], sometimes in both Greek and Arabic, with ΔΑΜΑΚΚΟC (often blundered) on the obverse and *Dimishq* in Cufic characters on the reverse. The obverse type has also borrowed elements from the earlier 'seated figure' *fels*, notably the bird in the left field and ΛΕΟ, or some blundered variant of this, in the right. The same type was used very commonly at Emesa, probably in succession to that with a facing bust, besides occurring on a very rare *fels* of Baalbek and another rare type of Tiberias. It occurs very commonly on blundered issues which have no mint-mark, the customary inscription being replaced by patterns of pellets, annulets and wavy lines [618].

(e) Two standing figures, usually holding transverse sceptres and the figure on the right with a globus cruciger as well. Walker derived this type from the folles of Heraclius and Heraclius Constantine, but the sceptres and the lower part of the imperial robes suggest rather a fusion between the 'two seated emperors' of the Scythopolis series and the single standing emperor of the *En touto nika* one. The type was mainly employed at Baalbek [621], the M on the reverse being flanked by ΗΑΙΘΠΙΟΛΕ, i.e. 'Heliopolis', the Greek name of the city, with *Ba'labakk* in Cufic script in the exergue. The same type was also used, though rarely, at Damascus.

These five types of Arab-Byzantine transitional coins were followed by a second series, struck at a much larger number of mints, in which the Arabic character is more strongly marked. Coins of this second series all have as their obverse types the standing figure of the caliph, wearing a long robe and Bedouin headdress (*kūfiya*) and resting his right hand on the hilt of his sword in the attitude prescribed for the *īmām* at the recitation of the public sermon (*khuṭba*) on Fridays. The uniformity of the obverse type shows that it must have been prescribed by a central authority, but the reverses are sometimes the traditional Μ of the preceding series, as on the coin of Jerusalem (Iliyā Filistīn) [630], sometimes a pillar with a circle or globe on steps, as on ones of Qinnasrin in northern Syria [631]. The latter design was modified from the familiar cross potent on steps of the Byzantine solidus, the 'cross' element in the design being eliminated because of its Christian associations. The inscriptions, which



by this time are purely Arabic, are mainly religious in content (e.g. 'There is no God but God. Mohammed is the prophet of God.'), but normally include the name of the mint and sometimes that of the caliph 'Abd al-Malik as well. Coins of the  $\mathbb{M}$  type are known only for Jerusalem, but there are also ones with M, perhaps from 'Ammān. Those with the pillar on steps were struck at about a dozen mints of which the most important were Aleppo (Ḥalab) and Qinnasrin in the north, Emesa, Baalbek and Damascus in the centre, and 'Ammān in the south.

The change to the second series of copper coins was preceded in date by the introduction of an Arab-Byzantine coinage in gold. Here the transitional types are of three kinds. The first have no specifically Arabic features about them. The coins are imitations of the solidi of Phocas or Heraclius, distinguished from the originals by the substitution of a pillar for the cross of the reverse type and by the elimination of crosses wherever they occur in the imperial ornaments and insignia on the obverse. A specimen copied from Class IV of the solidi of Heraclius is illustrated [622]. The second group of transitional gold coins [623] is based on Class IV of Heraclius, but the customary Latin inscription of the reverse is replaced by one in Arabic ('In the name of God. There is no God but God. Mohammed is the Prophet of God.'). These two transitional groups were followed by a third [624], which retains the reverse of the second but has on the obverse the standing figure of the caliph instead of those of Heraclius and his sons. Coins of the third class are dated, the years AH 74, 75, 76 and 77 (= AD 693/4 ff.) being recorded, and were presumably struck at Damascus, the capital of the Umayyad empire.

In the last of these years (AH 77 = AD 696/7) the first purely epigraphic Arab dinars, with inscriptions occupying both the field and the margin, were issued, and the transitional Arab-Byzantine coinages were gradually wound up. How early they had begun is not altogether clear. Walker was disposed to date them from the 640s onwards, envisaging them as filling the half-century gap between the Arab conquest of Syria in the late 630s and the early 640s and the introduction of a purely Arabic coinage at the end of the century. So far as the M and the  $\mathbb{M}$  coins are concerned this is theoretically possible, though it seems unlikely that they can have begun as early as the 640s. The African evidence shows that the copying of a Byzantine type might occur long after its original issue, and I am more inclined to ascribe them to the 670s or 680s, when coins struck before the Arab conquest and circulating in the provinces since that date would be beginning to wear out. The extremely rare transitional classes of the early gold can scarcely be dated before the early 690s, for they pass directly into the dated coinage of 693/4. The copper coins having as obverse type the standing caliph and as reverse type a pillar and circle on steps must belong to the same decade; they can scarcely have antedated the 'standing caliph' gold, and are only commoner because of the number of mints involved and a rather longer period of issue. Since figured types were less reprehensible on coins of an unimportant metal than they were on those of gold, they apparently went on being struck for some years after AH 77.

In North Africa the pattern of imitative coinages is quite different from that of the East.

The bulk of it consists of tremisses or *thulths* (third dinars); solidi and folles were scarcely struck at all. The normal obverse type for the gold is that of two facing busts, copied from the Carthaginian solidi of Heraclius and Heraclius Constantine, which circulated in enormous quantities in the country. They are all late, dating from the 690s and the early years of the eighth century, and they correspond in module to the last Byzantine issues of North Africa, being larger than the globular solidi of Heraclius and Constans II but much smaller than the solidi of Constantinople. It is possible that all of them post-date the final fall of Carthage in 698. The reverse shows a pillar on steps, with a bar or globe on top, and is evidently derived from the corresponding type in the East. A solidus and half solidus of this series are illustrated [625, 626]. Advances on these are types with an inscription or a star in the obverse field [627, 628], the first being a third dinar from North Africa and the second a half dinar from Spain. In copper there are coins with a similar reverse but with a facing bust as the obverse type. One bearing the name of the governor al-Nu'mān and the date AH 80 (= AD 699/700) is illustrated [629].

All these coins except the last are characterized by inscriptions in the Latin language and Latin characters, but Muslim in content and often with a fairly extensive omission of vowels, as if by way of assimilation to one of the most characteristic features of the Semitic languages. The obverse inscription on the African coin, for example, reads NON EST D(eu)S NISI IPSE SOL(us) C(u)I S(ocius) N(on est), i.e. 'There is no God but He alone, who has no companion', while that of the Spanish one has the variant NNESDSNISV-[NSCVINN]SASIMILS, i.e. *Non est Deus nisi unus cui non socius alius similis*, the last word being written across the field. The reverse inscription of the African solidus gives the denomination and mint: IN N(omine) D(omi)NI M(i)S(e)R(i)C(ordis) S(o)L(i)D(us) F(e)R(i)T(us) IN AF(rica), while the Spanish coin, in both obverse and reverse inscription, is stated to be struck in Spain: FE(r)ITOS S(o)LI(dus) IN SPAN(ia) AN(no) I. Many of the coins are dated, either by the years of the Hijra (e.g. AN XCVI, i.e. AH 96 = AD 714/15) or by indictions (e.g. IÑDC XI = IN(di)C(tione) XI = AH 94 = AD 712/13). The word *solidus* is used in the inscription just cited in the general sense of coin – it covers a tremissis as well as what the Byzantines would have termed a solidus – and the coins minted in Spain are sometimes both overweight – the solidi may go up to 4.75 g – and debased, the debasement being a result of Visigothic influence and the weight being less precisely regulated because of this fact.

The Arab-Byzantine and Arab-Sassanian transitional coinages, other than that of Spain, were brought to an end in the 690s as a result of the monetary reform of 'Abd al-Malik and his great minister Ḥajjāj, governor of Iraq. The decision to create a definitely Arab coinage was apparently taken in AH 74, the traditional reason given for it being Justinian II's introduction in c. 692 of solidi bearing the bust of Christ, which no self-respecting Muslim would care to use. The first partially 'reformed' coinages are the dinars and fulūs having the standing figure of the caliph and Arabic inscriptions; the dated specimens of these, as we have seen already, are of AH 74–7. They have their counterparts in the Arab-Sassanian

silver, in which at about the same time experimental issues were struck having such types as a standing caliph or a Muslim prayer niche (*mihrāb*) containing two of the traditional symbols of caliphal authority, a spear and pennant. But the figured coins with the effigy of the caliph were, according to tradition, 'reproved' by the religious leaders at Medina, so in AH 77 – or AH 79 in the silver – the purely epigraphic types were introduced. Only in the less important copper and in the provincial silver of Tabaristan did figured types last on into the eighth century. The reform also saw the abandonment of the old solidus weight of 4.5 g in favour of the slightly lighter one of the dinar (4.25 g), the new coin being equivalent to 20 Syrian carats of 0.212 g instead of 24 of the lighter Greco-Roman carats of 0.189 g.

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# THE ISAURIAN DYNASTY AND ITS SUCCESSORS, 717–820

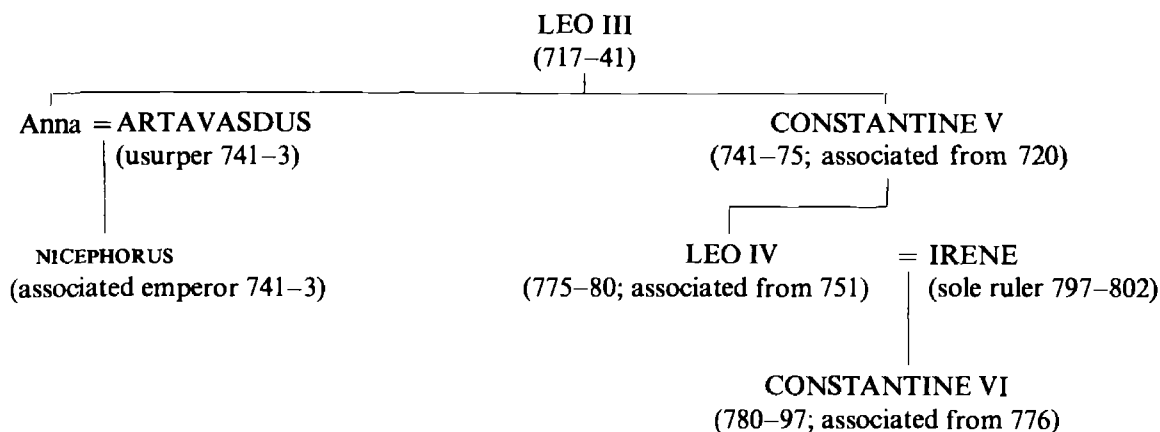
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## General features

Leo III the Isaurian – he was really a Syrian – came to the throne in 717 and founded a dynasty which lasted in the direct male line to 797 (Table 7). If one includes Irene, mother and successor of Constantine VI, it lasted to 802. Her deposition was followed by a series of brief reigns, each terminated by a palace revolution, until eventually Michael II came to the throne and founded the Amorian dynasty which lasted for three generations (820–67). The years of the Isaurian and Amorian dynasties, with those between them, form from many points of view a single historical period, but the coinages of the son and grandson of Michael II have closer affinities with those of the early Macedonians than with those of the Isaurians, while it is convenient numismatically to divide the period of the Macedonians and their successors into two halves at the death of Romanus II (963). This chapter and the next two will therefore cover the years 717–820, 820–963 and 963–1081 respectively.

The period 717–820 was more fortunate politically than that which preceded it. Leo III's reign began with the defeat of a great Arab attack on Constantinople (717–18), and his son's victories in eastern Asia Minor and Syria kept the Arab peril in check for long years on end. In 717 much of the Balkans was in Slavonic hands. A hundred years later the whole southern part of the peninsula (Greece and Thrace) had been recovered, although the Bulgarians, who defeated and killed Nicephorus I in 811 and whose ruler, the savage Krum, converted the dead emperor's skull into a drinking bowl, remained a formidable enemy in the north-east.

Table 7 The Isaurian dynasty



Only in the West had the imperial frontiers contracted for good. Ravenna was lost to the Lombards in 751; Rome became independent under the popes in the late eighth century; and much of south Italy was absorbed by the dukes of Benevento or attained practical independence in the form of self-governing city communities, of which the most important was Naples. Internally the history of the Empire was dominated by the Iconoclastic Controversy (726–87, 815–43). Although this technically ended in the defeat of the State, or rather of the policies advocated by Leo III and his successors, Orthodoxy was brought round to accept the curious compromise by which two- but not three-dimensional representations of sacred personages were allowed in religious art, and some check was imposed upon the pretensions and wealth of the Church. Leo III and his son were in any case highly successful in their secular capacity. The administration was reformed, the army was placed on a new and more effective basis, there was a considerable measure of economic recovery, and Constantine V, like Theophilus later, could negotiate on equal terms with caliphs at Baghdad.

The seventh century had seen the restriction of minting in the East to Constantinople, but in the West there were still mints in Italy and Sicily, while that of Carthage had only come to an end in 695 and in the early eighth century its moneyers were still active in Sardinia, hoping no doubt that a return to Africa might still be possible. In the course of the eighth century the Byzantine mints on the Italian mainland – Ravenna, Rome, Naples – ceased to exist as these cities passed out of imperial control, and the mint in Sardinia was closed either just before or just after the accession of Leo III. Sicily remained extremely important, however, throughout the eighth century, the mint of Syracuse continuing to strike gold and copper coinage in large quantities. Its issues are quite different in external appearance and to some extent in weight from those of Constantinople, and it is clear that the two halves of the Empire remained separate economically: the use of the silver miliaresion, for example, never penetrated the West at all. Constantinople was the sole mint in the East.

The list of emperors during the period is as follows:

Leo III the Isaurian	717–41	(with Constantine V from 720)
Constantine V Copronymus	741–75	(with Leo IV from 751)
Artavasdus, usurper	741–3	(with Nicephorus 742–3)
Leo IV the Khazar	775–80	(with Constantine VI from 776)
Constantine VI	780–97	(with Irene)
Irene	797–802	
Nicephorus I	802–11	(with Stauracius from 803)
Stauracius	811	
Michael I Rhangabè	811–13	(with Theophylact from December 811)
Leo V the Armenian	813–20	(with Constantine from December 813)

Coins are known of virtually all these emperors or combinations of emperors. There are two exceptions: the sole reign of Leo IV (14 September 775–24 April 776), and the two-month sole reign of Stauracius, after the death of Nicephorus (26 July 811). Stauracius was so gravely wounded in the battle in which his father lost his life that it was clear he could not long survive. He was in fact deposed on 2 October 811 and died shortly afterwards. As for Leo IV, he may have refrained from minting during the first six months of his reign because he was arranging for the coronation of his son. Artavasdus was the first usurper to have a coinage of his own since the remote days of Zeno's opponents Basiliscus (475–6) and Leontius (484), for the brief Sicilian coinage of Mezezius (668–9) can hardly be said to count. Usually the occupation of Constantinople, once achieved, was followed by a usurper's permanent acceptance as constitutional ruler, but Leontius, like Mezezius, had minted only in the provinces and in Artavasdus' case, as in Basiliscus', the legitimate emperor had subsequently recovered his capital. Irene minted first as regent for, or at least as associate of, her son, although the coinage of an Augusta had no recent precedents, and she subsequently became the first Byzantine empress to mint as sole ruler, an achievement not to be repeated until the mid-eleventh century.

A peculiar feature of Byzantine coinage in this period is that almost none of it is in the name of a single ruler, but in that of two or more. The reason is that each emperor, in the hope of ensuring the succession for his son, associated the latter with him on the throne as soon as possible, usually only a few months after his own accession. The numismatic picture is further complicated by the curious arrangement begun under Constantine V by which his father, though deceased, was shown on the reverse of the gold and copper coins. The practice was continued under his two successors, so that there are in all five separate groupings of rulers: (1) Leo III (bearded) and his son Constantine V (beardless); (2) Constantine V and his father Leo III (both bearded); (3) Constantine V (bearded), his son Leo IV (beardless) and his father Leo III (bearded); (4) Leo IV (bearded), his son Constantine VI (beardless), and his father and grandfather (both bearded); and finally (5) Constantine VI (beardless), his mother Irene, and his father Leo IV, his grandfather Constantine V, and his great-grandfather Leo

III (all bearded). On the solidi of Leo IV the relationship is spelt out at length (see p. 158). This quite novel practice can probably be regarded as a result of the influence of Muslim ideas, for it was a kind of pictorial equivalent of the pedigree (*nasab*) which an Arab was accustomed to attach to his personal name. The five effigies of Constantine VI's early coinage, however, involved the die-sinkers in almost insuperable difficulties, with two busts on the obverses of the coins, three busts or three seated figures on the reverses, and impossibly crowded inscriptions. Irene had as little love for Constantine's forebears as she had for their religious policies, and it is not surprising that the issue with five effigies was the last of the series. Soon after the condemnation of Iconoclasm by the Council of Constantinople in 787 all the ancestors were swept away and a more reasonable type was introduced, having the bust of Irene on one face and that of Constantine VI on the other.

The attributions of some of the coins still present problems. Coins of Leontius were formerly attributed to Leo III, as explained in the preceding chapter. Difficulties have arisen over coins on which a Constantine is associated with a Leo, since this combination occurred three times in the course of a century (Leo III/Constantine V, Leo IV/Constantine VI, Leo V/Constantine), but most of these have now been cleared up. It remains difficult, however, to distinguish *miliaresia* of Leo III from those of Leo IV, since their types and inscriptions are identical and the distinction depends upon the form and proportions of the cross which forms their reverse type. There has been some confusion between coins of Michael I and Michael II, especially over their *folles*; and it is often hard to be certain of the attributions of Sicilian gold, for the inscriptions are generally illegible, partly through bad lettering and partly because sections are usually off-flan. Some of the details of the current arrangement may have to be modified in the future.

The designs of the coins have little to commend them beyond their general neatness. Portraiture has totally disappeared, although account is sometimes taken of age, and the junior emperor, if a child, is shown with appropriately smooth, rounded features. The style is flat and linear, and although the senior emperor is normally featured with beard and moustache, the beard is often no more than a slight thickening or hatching of the line of the jaw and the moustache is a thin horizontal line below the level of the nose. Such beards did not necessarily correspond to reality: we happen to know, because of the Church's disapproval, that Constantine V was clean shaven. The normal imperial type consists of one bust or two; seated figures are rare, and standing ones do not occur at all. Costume and insignia are very uniform throughout the period. The costume is invariably either a *chlamys* or a *loros*, both stylized and the latter no more than a pattern of lozenge-shaped compartments each usually containing a pellet. The normal insignia are the *globus cruciger* or the *akakia*, though cross-sceptres and patriarchal crosses sometimes appear. The crown or diadem is shown as a simple band surmounted by a cross, usually on a circle or half-circle, and is without *pendilia*. Irene wears a crown with pyramidal decorations and long *prependulia* hanging down to shoulder level. The reverses of the gold coins are almost always either a co-emperor or a deceased predecessor instead of the traditional cross. Although a cross, as

a major reverse type, was briefly revived by Artavasdus and Nicephorus I during their sole reigns, it was by the early ninth century felt to be so unusual for the gold that Michael I and Leo V, during the few months when each ruled without a colleague, put their own busts on both sides of the coins, as Irene had done during her substantially longer reign.

The design of the silver coins, if uninspired, was at least partly novel, for the obverse bore simply an inscription in several lines, and had as reverse type the cross potent on steps now rejected from the solidus. The type seems to have been partly suggested by Byzantine seals, but the appearance of the coin was even more strongly based on the Muslim dirhem, from which it borrowed its broad, thin fabric, the idea of an inscription in several lines, and the triple dotted borders. Byzantine miliaresia are sometimes found overstruck on cut down dirhems, the clipping being required because the weights of the two denominations were not the same.

The copper coins are in general better rounded and more neatly struck than had been customary in the late seventh century, and the designs were modified in various ways. The most conspicuous innovation is the insertion of a bust or busts of colleagues on the reverses, though these have to be fitted into the space above the mark of value and in some issues, because of the reduced diameter of the coins, appear only on the full follis. Marks of value other than M disappear after the mid-eighth century, the pentanummium and decanummium ceasing to be struck altogether and the half follis adopting the M of the follis and being differentiated from this purely by size and weight. Evidently the numerical meaning of M, as implying a multiple of 40 nummi, was no longer of significance to users. The traditional date formula, arranged vertically on either side of the mark of value, was immobilized, the ANNO XX of the last large issue of Justinian II being modified into an ornamental ANN XX or AA XX on coins of Leo III and ultimately becoming a quite meaningless XXX NNN or X N. The mint-mark CON disappeared after the first coinage of Leo III, and the officina letters were reduced to A and B on the later issues of Leo III and to A only under Constantine V. Presumably only one officina was by that time in use, but it was thought appropriate to retain a letter in the customary position.

The content of the inscriptions changed substantially during the seventh century, the use of Greek becoming more prominent. DN was last used of a reigning emperor on eastern coins under Constantine V, although it continued to accompany Leo III's bust until later in the century. PPAVG had already been replaced on coins of Justinian II's second reign by the acclamation *multos annos* (abbreviated), but this in turn was discontinued under Constantine V. The Greek title *basileus*, applied to both colleagues, was first used on the miliaresia introduced in 720. Leo IV's gold coinage had too many relationships to describe for any use of titles to be possible, and those on the early solidi of Constantine VI are so abbreviated as to be largely unintelligible, but Constantine's certainly includes *basileus* and Irene's *Augusta*, which are distinctly inscribed on the last coinage of the reign. Irene during her sole reign calls herself *basilissa*, instead of *basileus* as in her legislation, but this title is given her on a solidus of Sicily. *Despotes* was introduced on the copper coinage of Sicily



under Leo III but on the gold of Constantinople not until seventy years later, under Nicephorus I, and then only for the junior emperor.

The title *basileus Romaion*, instead of a simple *basilēus*, is first used on miliaresia of Michael I. This change had political overtones, for in 811 Michael had been compelled to recognize the imperial title of Charlemagne and he wished to emphasize that while his western counterpart might indeed be *basileus* it was the emperor reigning at Constantinople who was *basileus* 'of the Romans'. Pious phrases like 'in God' or 'by God' (*en Theou, ek Theou*), the Byzantine equivalent of the western *Dei Gratia*, are used on the silver, but on the silver only, thus underlining the connection between the design of the miliaresion and the seals. Personal names often have Greek endings (*Leon, Artavasdos*) but the lettering remains predominantly Latin with some Greek admixture, especially for such letters as *th* and *kh* (e.g. MIXAHL,ΘCOFVLACTOS).

A notable change in the coinage as a whole, which was to carry on into the future, was the simplification of the denominational pattern. By the end of the Isaurian period there was normally being struck in the East only a single denomination in each metal, the solidus, miliaresion and follis. Fractional gold had ceased to be struck, save for ceremonial purposes, by 750; a third miliaresion was struck once only, under Leo III, and then in such small quantities that only two specimens are known today; fractional copper, marked as such, had ceased under Constantine V, and even unmarked half folles were only to be issued under Leo IV. The situation in the West differed only in the retention there of fractional gold, mainly the tremissis, a consequence partly of the fact that this was the typical denomination of the Lombards, partly of the absence of any silver coinage intermediate between the gold and the copper. Probably there was considerable modification in the value pattern, for the typical follis of the late eighth century weighed about 5 g, much less than that of the Justinianic period, but the range of weights is very large and how many folles were reckoned to the solidus is unknown. The term *dikeration*, applied to a tax of miliaresion per nomisma levied by Leo III to restore the walls of Constantinople after an earthquake, suggests that miliaresia were reckoned 12 to the solidus and thus were token coins, greatly overvalued in respect of their metal content.

The tendency to simplification also affected the mints and the organization of issue. All eastern coinage was minted at Constantinople. *Officina* letters had never been used on Byzantine silver, and we have already seen how the number of officinae for the copper was reduced from five to one by the end of the eighth century. The pattern for the gold is more complicated. Down to 717 the mint at Constantinople had retained virtually unchanged the division of solidi between ten officinae (A-I), which had existed since the fourth century and to which issue marks were occasionally added, as in the early years of Leo III. In the later part of Leo's reign this system seems to have broken down, so that some solidi are either without officina letters at all or have them unexpectedly on the obverse instead of on the customary reverse, though the occasional recutting of one over another shows that those which survived still had some kind of function. Under Constantine V most of the traditional

letters disappeared and new ones, notably an X and a Θ (or ⊕), which could have had no numerical significance in such a context, took their place. What were originally officina letters have been replaced by what are best termed control marks.

The distinction between the coinages of the eastern and western provinces in the Empire, always marked, is particularly apparent in this period. Some of the contrasts have been noted already, notably the retention of the tremissis in the West and the failure to adopt the miliaresion. So far as coin designs were concerned, the western mints seem to have been left to their own devices: some of the coin types copy those of the metropolitan mint, while others are completely original. The debasement of the gold had already begun in the late seventh century, and at Rome, in the mid-eighth century, it reached what must have been catastrophic proportions, many ostensibly 'gold' coins being of poor quality copper or potin, with apparently no silver in their composition, still less any gold. How this must have affected prices and values is hard to say, for not the least curious feature of the phenomenon is that although the *Liber Pontificalis* is for this period unusually informative and papal correspondence is plentiful, no references to monetary troubles occur in either source.

## Constantinople: gold coinage

### SOLIDI (PL. 35)

Leo III's coins fall into two periods, those of his sole reign (717–20) and those of his rule in association with his son Constantine V (720–41). At his accession he envisaged a return to the fifth-century type with armoured bust which had been recently revived by Constantine IV and Tiberius III and would have admirably symbolized his own military achievements, but the project was abandoned and only a few striking in silver are known [658]. His early solidi are instead of the civilian type that had become customary, showing his crowned and cloaked bust holding a globus cruciger and akakia and having on the reverse the usual cross potent on steps [632]. The obverse inscription begins DND (for DNO, i.e. *Domino* or more likely *Domino nostro*) and ends with PAMVL' or PAMϣLA, i.e. P(*erpetuo*) A(*ugusto*) Mul(*tos*) A(*nnos*), a new rendering of the customary *laudes* already favoured by his immediate predecessors (see p. 99). The reverse inscription, on both the projected issue and the one actually struck, is the traditional VICTORIA AVGϣ followed by an officina letter, itself occasionally followed by a C, the meaning of which is unknown.

The second and third coinages of the reign (720–41) merge into one another, the type being formally the same for both. The obverse saw no change from the previous class. The traditional reverse type was transferred to the silver miliaresion, then struck for the first time, and was replaced on the gold by the facing bust of Constantine V. On the earliest coins of Class II [633] this is shown small, with rounded, childish features; gradually it becomes larger, until the junior emperor is a boy in his teens. The inscription is UNCONST

ANTIN<sup>4</sup>SM. The last letter might be understood as an abbreviation for *multos annos*, but since it disappears from the last coinage of the reign it should probably be regarded as standing for *minor*, i.e. the equivalent of the Greek ὁ νέος, which was sometimes rendered into Latin by this word instead of by the *iunior* one would expect. On the earliest coins there is usually an officina letter, but on the later ones this is often absent. Finally, on the third coinage of the reign (c. 737–41), Constantine V is shown as fully adult but still beardless, the M disappears, and the officina letter, perhaps for reasons of space, is, when present, transferred to the obverse [634]. Constantine's name is sometimes followed by θ or ι, or is preceded by NC (ligatured), which do not seem to be related to the officina letters on the obverse and are presumably some kind of control mark whose meaning is uncertain.

Leo III was succeeded by Constantine V, but since a year later Constantine was temporarily ousted by his brother-in-law Artavasdus (742–3) the latter's coinage, which is very rare, can be dealt with first. Despite the shortness of the reign there are no fewer than three types of solidus. The first [635], struck while he ruled alone, reverted to the traditional cross-on-steps reverse, but represented a curious compromise with the silver, for while it revived the use of CONOB, for the last time on Byzantine coinage, it took over from the miliaresion the *Ihsus Xristus Nica* inscription. The bust on the obverse is like that of Leo III, but Artavasdus holds in front of his body a small patriarchal cross, a novelty as such on the coinage. This type of solidus was followed by one [636] on which Artavasdus' son Nicephorus, wearing the same costume and holding the same insignia as his father, occupies the obverse, and this again by a third type on which Nicephorus wears a loros and both rulers discard the patriarchal cross in favour of the more traditional globus cruciger and akakia.

It was Constantine V who introduced the practice of using his father's bust as the reverse type. On the solidi [637] of his sole reign (741–51) his own bust, cloaked and holding a cross potent on base and an akakia and with the simple inscription bN CONSTANTIN<sup>4</sup>S, occupies the obverse, while a similar bust of his father with the customary but now scarcely appropriate PA M<sup>4</sup>L', usually followed by an officina letter, occupies the reverse. Both effigies are bearded. After 751 both obverse and reverse were changed. The obverse type consists of the two cloaked busts of Constantine V (bearded) and Leo IV (beardless), the latter being described as ὁ νέος, while on the reverse there is a bust of Leo III holding the usual cross potent on base but now wearing a loros. The inscription is sometimes followed by A (rarely) or θ, or by B or φ on the later issues. This class, which was issued over a period of nearly twenty-five years (751–75) falls into two groups, one early, with the bust of Leo IV very small, and a later one [638] on which this became much larger, almost equal in size to that of Constantine V.

No coinage is known of the first months of Leo IV's reign, before the coronation of Constantine VI. All his solidi have four effigies, those of the emperor and his son on the obverse, those of Leo III and Constantine V on the reverse. They form two classes, the first (776–8) having the busts of Leo IV and Constantine VI [639], the second (778–80) their seated figures [640], the change having been made after a great victory over the Arabs which

was celebrated with unusual pomp and with the two emperors, Leo IV and his infant son, showing themselves seated side by side to the crowd. The inscriptions, which on account of the confined space are in very small characters and often incomplete or off-flan, read on the obverse **ΛΕΩΝ ΥΙΟΣ ΕΙΣΟΝ ΚΩΝΣΤΑΝΤΙΝΟΣ Ο ΝΕΟΣ**, i.e. Λέων υἱὸς καὶ ἑγγονος Κωνσταντῖνος ὁ νέος ('Leo [the] son and grandson, Constantine junior'), and on the reverse **ΛΕΩΝ ΠΑΤΡ' ΚΩΝΣΤΑΝΤΙΝΟΣ ΠΑΤΗΡ**, i.e. Λέων πάππος Κωνσταντῖνος πατήρ ('Leo [the] grandfather, Constantine [the] father'). One or other of them is usually followed by a θ.

Constantine VI's coinage, or rather the coinage issued by his domineering mother in his name, is of two main types. The first, struck probably between 780 and 792, continued the family tradition of including as many ancestors as possible on the coinage, the bust of Constantine himself and his mother Irene being shown on the obverse and three seated figures on the reverse. On the earlier coins of this type (780–90) Irene holds a globus cruciger as well as a cross-sceptre; on the later ones (790–2) she holds only a cross-sceptre [641]. The inscriptions vary somewhat in detail, and it may be doubted if the die-cutters fully understood what they were trying to do. On coins showing Irene with a globus cruciger the inscription begins on the reverse with the name of Constantine followed by **Κ' Β' Δ'**, the **β** being often written as **ρ** and the **Δ** by what looks like a **β**. These letters can best be interpreted as **καῖσαρ βασιλεύς δεσπότης**, though **καῖσαρ** had by this time ceased to form a normal part of the imperial style, being granted instead to younger sons of the *basileus*. The inscription continues on the reverse with **ΣΥΝ ΙΡΙΝΙ ΑΥΓ' ΜΗΤΡΙ ΑΥ'** or variant, i.e. **σὺν Εἰρήνῃ Αὐγούστη μητρὶ αὐτοῦ** ('with Irene [the] Empress, his mother'). This anomalous arrangement of starting the inscription on the reverse, thus placing Constantine's name on the less important side of the coin, was perhaps a device of Irene for ensuring that her own name came on the obverse. In 790 she fell temporarily from power, and although Constantine did not go so far as to oust her from the coinage entirely, the change was marked by the disappearance of her globus cruciger, which had become the customary mark of sovereignty, and by a rearrangement of the inscription, which was now made to start on the obverse, so that Constantine's name occurred in its proper place.

Irene recovered power in 792. Constantine VI's ancestors, whose presence on the coinage had survived the condemnation of Iconoclasm in 787, were now dispensed with, and for the next five years the solidi [642] have on the obverse the bust of Irene with the title of Augusta (**ΙΡΙΝΗ ΑΓΟΒΣΤΙ**, sometimes spelt **ΗΡΗΝΗ ΑΥΓΥΣΤΗ**) and on the reverse that of her son with the title of *basileus*. The relationship of obverse and reverse is shown by the fact that Constantine's title is usually followed by an officina letter (θ) and by comparison with the folles, while Constantine's subordination is underlined by the fact that he is always beardless, despite his having attained his majority, and that his mother's name and title are in the vocative case, as the object of the acclamation 'thou conquerest'. The obverse type remained unchanged during Irene's sole reign (797–802), but **ΑΓΟΒΣΤΙ** was replaced by **ΒΑΣΙΛΙΣΣΗ** and her name is spelled **ΕΙΡΙΝΗ** [643]. Inscription and type were repeated on the reverse of the coins, the reverse inscription being regularly followed by ⊕, ⊙ or X.

The coinage of Nicephorus I (802–11) marks a reversion to traditional types. The

obverse, throughout the reign, has his facing bust holding a cross potent on base and an akakia, a type going back to Constantine V, but the forefinger of the emperor's right hand, which holds the cross potent, is made to point towards his head in a curious gesture copied by all his successors down to Michael III. His title is that of *basileus*. When he reigned alone (802–3) the reverse type was a cross on steps with miliaresion inscription IHSϞS XPICTϞS NICA [644], but there was no revival of CONOB and the inscription is followed by a control letter (X, ⊕). This reverse was replaced in 803 by one showing the bust of Stauracius [645] with the title of *despotes* followed by € , ⊖ or X. Some of the coins with Stauracius, apparently the earliest of the series, differ somewhat in appearance from the main group, having smaller busts and being struck on broader flans.

No coins are known of the brief sole reign of Stauracius (July–October 811) and no solidi of Michael I alone (October–December 811). His solidi struck in company with his son Theophylact (811–13) are of the traditional type [646], as also are those [648] of Leo V and Constantine (813–20). During Leo V's sole reign (July–December 813) his solidi [647] show him on the obverse with a cloaked bust holding a cross potent on base and an akakia and with the title of *basileus*, while on the reverse he wears a loros, holds a globus cruciger, and has the title of *despotes*. The control marks in the period 811–20 are € or X, or more rarely Λ. The fact that € has sometimes been altered on the die to X and vice versa shows that these marks were not meaningless survivals but performed some useful function.

#### SEMISSSES AND TREMISSSES (PL. 36)

The semissis and tremissis, as coins in regular use, ended in the East under Leo III. Specimens of both denominations, corresponding to each of the three classes of solidi, are known. The reverse types are a cross potent on globe (semissis) or a cross potent (tremissis) on the first coinage of 717–20 [649, 652], and one or other of these symbols held by Constantine V on those of the remainder of the reign [650–1, 653]. On the later issues there are variations in module that are not easy to explain. There is a half tremissis of the earliest coinage with Constantine V [655].

From 741 onwards the denominations are of extreme rarity and for most reigns no specimens at all are known. The type is in almost every case that of the solidus struck on a smaller flan. The following is a list of the actual coins known to me for the period 741–820.

1. Artavasdus alone. Semissis (with cross potent above globe). [656].
2. Constantine V alone. Semissis (bust of Leo III on obverse). (R. 1746)
3. Constantine V and Leo IV. Semissis (type of solidus, but Leo III holds a cross potent on globus). [654]
4. Nicephorus I alone. Tremissis (type of solidus). [657]

No doubt a few more types and specimens will come to light in due course. The Byzantine historian Theophanes, writing in the early ninth century, describes how semisses and tremisses, as well as newly minted solidi, were thrown to the crowd when Constantine V

raised his younger sons to the rank of Caesar and Nobilissimus in 768. It is so unusual for a Byzantine writer to mention specific denominations of coin that this reference can in itself be taken as evidence of how unfamiliar these two denominations had already become.

## Constantinople: silver coinage (Pl. 36)

Leo III's creation of a new type of silver miliaresion to take the place of the Heraclian hexagram, which had not been struck in any quantity for more than a generation, marks one of the chief dividing lines in Byzantine numismatics. The new coin [659, 661–7], in its fabric and general appearance, owed nothing to the traditions of Roman coinage, but fitted in so well with Byzantine taste that its main features lasted practically without change for nearly three centuries. It is very thin, much thinner than any previous Byzantine coins had been, and a little over an inch in diameter. The obverse 'type' consists of an inscription in five lines running across the field, with the names and titles of the emperors; the reverse has a cross potent on three steps and the inscription  $\text{I}\eta\text{S}\chi\text{S}\ \text{X}\text{R}\text{I}\text{S}\text{T}\chi\text{S}\ \text{N}\text{I}\text{C}\text{A}$  ('Jesus Christ conquers'). On each face of the coin there is normally a triple outer border of dots. The obverse inscriptions are usually in the vocative case, so that they represent a form of acclamation:  $\text{L}\text{E}\text{O}\ \text{S}\ \text{C}\text{O}\text{N}\text{S}\text{T}\text{A}\text{N}\text{T}\text{I}\text{N}\text{E}\ \text{E}\text{C}\ \Theta\text{E}\chi\ \text{B}\text{A}\text{S}\text{I}\text{L}\text{I}\text{S}$  ('O Leo and Constantine, emperors through God'). With Michael I [665], as already noted, the imperial title is expanded to  $\text{B}\text{A}\text{S}\text{I}\text{L}\text{I}\text{S}\ \text{R}\text{O}\text{M}\text{A}\text{I}\text{O}\text{N}$  ('emperors of the Romans').

A peculiar feature of the coinage, for the first hundred years of its existence, is the fact that it was never issued by a single emperor during the months or years of his reign when he ruled alone before associating his son with him on the throne. There are no silver coins of Leo III before the coronation of Constantine V, of Constantine V before that of Leo IV (there is here a ten-year gap), or of Leo IV before that of Constantine VI; there are no silver coins of the five-year reign of Irene at all. The reason for this can only be that the coin was originally envisaged as ceremonial in character, to be thrown to the people on the occasion of a coronation, and though in practice miliaresia were struck on a large scale and fulfilled a real economic role, the tradition of their ceremonial function was too strong for them to be struck at the beginning of each reign.

The aniconic appearance of this coinage was presumably dictated by the prejudices of the Iconoclastic emperors. Wroth by a curious slip attributed the introduction of the miliaresion to Constantine V, but even on his own showing the silver coins of this emperor were all struck after the association of Leo IV as co-emperor in 751 and would therefore have been antedated by those of Artavasdus and Nicephorus (742–3). It is now admitted that the coins attributed by Wroth to Leo IV and Constantine VI must in part be attributed to Leo III and Constantine V, so that the coinage was in fact introduced by Leo III in or soon after 720.

The usual problem of distinguishing between the coins of the three Leo-Constantine combinations is partly simplified by  $\text{R}\text{O}\text{M}\text{A}\text{I}\text{O}\text{N}$  added to the inscription in 811, for those

coins on which it is present can only be ascribed to Leo V. The separation of the coins of Leo III and Constantine V [659] from those of Leo IV and Constantine VI [663] is more difficult, since the types are identical, but the form of the cross underwent some slight change in the course of the eighth century. A comparison with the miliaresia of Artavasdus and Constantine V shows that on those of Leo III the cross tends to be tall and narrow (type A),



A



B

with the horizontal arms ending in long, vertical bars; the bar across the upper arm of the cross is also well away from the inner circle of pellets and the steps are narrow and clearly separate from each other. On miliaresia of Leo IV and Constantine V, which can be compared with those of Constantine VI and Irene [664], the cross tends to be broad (type B), with short bars at the ends of the horizontal arms; the top bar of the cross is close to the inner circle of beading and sometimes slightly bent so as to follow its curvature; and the steps are broader and show a tendency to coalesce at the ends and slope upwards. These criteria are not always easy to apply, for they represent extremes and many specimens belong to intermediate stages in the evolution of the design, but one is sometimes helped by other features. On coins of Leo III there is normally a pellet, or occasionally a rosette, at the end of the imperial inscription on the obverse, while under Leo IV a pellet rarely occurs.

There was normally only a single denomination, but some rare specimens of a one-third miliaresion of Leo III [660] are known. The fact that they have the cross potent on a globus instead of on a flat base suggests that, like the semissis, they were intended as halves, as they are described in the *Dumbarton Oaks* catalogue, but their size and weight are more indicative of thirds. The weights of the full miliaresia are very irregular, a consequence partly of their token character, which made their exact weights unimportant to users, and partly of their often being very badly clipped. They usually weigh between 1.7 g and 2 g but sometimes rise as high as 2.25 g, suggesting that they may have been struck 144 to the pound, with a theoretical weight of 2.27 g. The denomination was apparently reckoned at 12 to the solidus, so that the value of the coins as metal was far below their legal reckoning, but positive evidence for this is lacking.

### Constantinople: copper coinage (Pls 37, 38)

The copper coinage of the Isaurians represents the final declining phase of the system introduced by Anastasius I and extended and systematized under Justinian I. The main features of this decline have been summarized already (see pp. 5–6). Our knowledge of the types may still be incomplete: one entire class of coins of Leo III only came to light after the

publication of the third volume of the Dumbarton Oaks catalogue in 1973. The coinage needs to be described in some detail, since many of the identifications given in the older works of reference are incorrect. Wroth, for example, claimed no coins of Leo III for the British Museum, and the two which he cited from Sabatier are coins of Leontius. It is indeed over Leo III that confusion has mainly arisen, with coins of Leontius ascribed to Leo III and coins of Leo III to Constantine V or Leo V, who himself also managed to acquire some coins of Nicephorus. Even ascription to the correct rulers does not solve all our problems, for some issues were apparently struck to a series of separate weight standards, and how the monetary system was organized we do not know at all. The many changes in weight were presumably reflected in revaluations of the follis in terms of the miliaresion and the solidus, but we lack the written evidence which might throw any light on what these revaluations involved.

### *Leo III, 717–41*

Five issues of copper can be assigned to Leo III. One of them is for the present best numbered 1 bis, since further types may yet come to light.

1. 717–20. No pentanummia known, and only Officina A [668–70]. Inscr. Armoured bust with sceptre./M, K or I with date (ANNO) XX'. The mint-mark CON is used on the follis and decanummium. The obverse type was that intended for Leo III's first type of solidus and then discarded, so that it is known only in the form of silver strikes [658]. The reverses of the folles and half folles are copies of those struck by Justinian II after his restoration in 705, whence the date Year 20. The decanummium [670] is known to us only from specimens that came to light in the excavations of the Athenian Agora.

1 bis. 718. Only folles [671] and half folles, and only Officinae A, B and Γ recorded. Inscr. Standing figure of Leo, wearing loros, raising akakia in his r. hand and holding long cross in l./As last. A half follis of this type was wrongly attributed in *DOC* 2, 609/85, to the first reign of Justinian II, but the subsequent discovery of others with more legible inscriptions shows that they belong to Leo III. The consular costume dates them to 718.

2. 720–c. 732. No pentanummia known, and only Officinae A, B and Γ recorded. Struck successively to three weight standards, with folles of c. 9/10 g, c. 5/6 g and c. 3/4 g respectively. The heavy coins (720/c. 721) show Constantine V as an infant; the medium (c. 721/c. 725) and light ones (c. 725/c. 732) show him as somewhat older.

*Follis* [672–4]. Inscr. Bust facing wearing chlamys./Inscr. (often ends M). Bust of Constantine V above a balustrade, probably intended to represent the edge of the imperial box (*cathisma*) in the Hippodrome; below, M between ANN (or AA) and XX, i.e. an immobilized and now meaningless 'date'. A variety has an unexplained R beneath the XX. Officina mark below M.



*Half follis* [675–6]. Similar, but K between ANNO (heavy coins) or ANN and XX.

*Decanummius* [677]. Similar, but I between ANN and XXX.

3. 732 (?). Only folles [678] and half folles [679] recorded, and only Officinae A and B. No inscr. Two busts, wearing chlamys and loros respectively, holding between them a cross potent./M or K between NNN and XXX, cross above. Officina letter beneath. These rare coins were formerly attributed to Justinian II and Tiberius, but the absence of CON from the folles precludes so early a date. They are sometimes found overstruck by coins of the next class of Leo III, which prevents our attributing them to Artavasdus and Nicephorus. They can be dated tentatively to 732, when Constantine V attained his majority. The half follis is only known from the Agora excavations.

4. c. 732/741. Only folles and half folles known, and Officinae A and B. LEON S CON. Two busts facing./M or K between XXX and NNN.

They form two series, the first (c. 732–c. 735) with Constantine beardless and the inscription starting between the heads [680–1], the second with Constantine bearded and the inscription, usually spaced LE ONS CON, starting on the left [682–3]. There are perhaps two weight standards, with folles of 4–6 g and 2 g, but the coins are usually in such poor condition, or are struck on such inappropriate flans [cf. 681], that one cannot be sure.

No copper coinage is known for Artavasdus, though it is unlikely that he failed to strike any.

#### *Constantine V, 741–75*

Four classes of copper coins can be ascribed to Constantine V. The first two do not include Leo III, though he appeared on the gold from the start of the reign.

1. 741–(?). Officinae A and B. Inscr. Cloaked bust holding globus cruciger and akakia./M, K or I between XXX and NNN [684–6]. The decanummius is unusual in that there is an officina letter, usually absent on this denomination, below the I. The end of this issue cannot be precisely dated, since Classes 1 and 2 cover the whole period 741–51, but the extreme rarity of Class 2 suggests for this a very short period of issue.

2. (?)–751. Only half follis [687] and pentanummius known [688].

*Half follis*. As previous issue, but the bust is older and holds a cross potent (not globus cruciger) and akakia. Only Officina A recorded.

*Pentanummius*. As half follis./A large €.

3. 751–69 (?). Follis and half follis. [689–90]

*Follis*. No inscr. Two cloaked busts./Bust of Leo III (wearing loros) above M, with X to l. and N to r. Only Officina A recorded.

*Half follis*. As follis./Unchanged from preceding classes.

4. 769 (?)–75. Follis and half follis. [691–2]

*Follis*. No inscr. Two seated figures./As Class 3.

*Half follis*. As follis./Unchanged. The half follis of this issue was the last with the value letter K.

#### *Leo IV, 775–80*

The short reign of Leo IV saw only two classes, which like the solidus can be dated 776–8 and 778–80 respectively. The follis of Class 1 [693] has on the obverse the busts of Leo IV and Constantine VI, on the reverse those of Leo III and Constantine V above an M. To either side of them are the letters BA, usually interpreted as *basileus*, though it is difficult to see why Leo IV should have wished to label his predecessors in this way. The half follis [694] is of the same type, but smaller in size, and the letters BA are absent. Class 2 [695] has two seated figures on the obverse; the reverse is unchanged save for the omission of BA. There are corresponding half folles.

#### *Constantine VI, 780–97*

The copper coinage of Constantine VI follows the pattern and chronology of the gold. Class 1 (780–90) has on the obverse the busts of Constantine VI and Irene, the empress having no globus cruciger; on the reverse are three busts above M [696]. Class 2 (790–2) is the same, but Irene holds a globus cruciger. Class 3 (392–7) has on the obverse the bust of Irene and on the reverse that of Constantine VI above M [697]. It is important as showing that Irene has usurped the obverse of the coin, which is not so apparent on the gold but is equally the case there.

#### *Irene, 797–802*

Irene's own coins [698] have her bust on the obverse, as on the last coins of Constantine V, but with her name and title  $\epsilon\text{Ι}\text{ΡΙ}\text{Ν}\text{Η}\text{Β}\text{ΑΣ}'$ , a welcome return to the use of inscriptions, which had practically disappeared from the copper. The reverse type is a return to the large M between NNN and XXX which had been customary before the Isaurians began to clutter up the coins with their relations. This reverse type was to remain unchanged for the next two decades.

#### *Nicephorus I, 802–11*

Nicephorus I struck two classes of folles. Class 1 [699], issued in 802–3 while he ruled alone, has a cloaked bust and an inscription like that of Irene ( $\text{NI}\text{C}\text{I}\text{F}\text{O}\text{R}'\text{b}\text{A}\text{S}'$ ), so there is no problem of identification. Class 2 [700] has two cloaked busts and no inscription. Wroth ascribed the coins to Leo V and Constantine, for whom a similar type (with inscription)

exists, but it is extremely unlikely that there should be no coinage for the eight-year reign (803–11) of Nicephorus and Stauracius, and the emperor may well have felt that the type, which had no close parallel for half a century before, needed no precise identification. Later emperors, however, ruling with their sons as colleagues, would have to identify *their* coins to distinguish them from those of Nicephorus and Stauracius.

### *Michael I, 811–13*

The coinages of Michael I and Leo V both raise some problems. In Michael's case there are the facts that Michael II was so close to him in date and that both emperors had sons whose names, Theophylact and Theophilus, began in the same manner. Wroth assigned all small-module coins to Michael II and Theophilus. But at least two specimens of small-module coins seem to read OEOFI, which can only represent Theophilus, and the tall, narrow M of the reverse type is closer to that of Leo V's later years and of the large-module coins of the 820s than it is to the squatter and broader M of Nicephorus I's reign. It seems, therefore, that the coins are better given to Michael II, though one cannot be altogether happy with an arrangement which leaves Michael I with no copper coinage at all. It is possible, of course, that he continued to issue the anonymous coins of his predecessor.

### *Leo V, 813–20*

As for Leo V, the coins [701] of his sole reign (813) raise no problem, but those [702] of his joint reign with his son Constantine (813–20) are formally of the same type as Leo III's Class 4, and have been confused with them in the past. They differ, however, in style and letter forms, and in the arrangement of the inscription, coins of Leo V having CONST' or CONSTAN' instead of CON.

## Sicily: gold coinage (Pl. 40)

The gold coinage of Sicily in the Isaurian period is for the most part rare, and presents a number of still unsolved problems. After 720 the coins in general follow the pattern of Constantinople in having a bust on each face, but they are of very different workmanship, with the lines cut in high relief, so that although the thin linear border which had distinguished Sicilian gold in the seventh century disappears, there is no problem over distinguishing the coins from those of the East. The mint is presumed to have been Syracuse, as it had been in the late seventh and early eighth centuries. Though the quality of the gold is clearly superior to that of coins of the Italian mainland, it seems to be inferior to that of Constantinople, and the weights of the coins are very irregular. The legends are often partly off-flan and the lettering, in the later eighth century and the first years of the ninth, is very

bad, individual letters being made with one or two small punches and having scarcely any shape at all. The attribution of individual coins to the correct reigns is in consequence frequently uncertain.

The coins of Leo III form three classes. Class I (Leo alone, 717–20), for which only solidi are recorded, has the traditional cross-on-steps reverse, with a P in the field and a star after the inscription [732], as under Theodosius III [509]. Class II has the bust of Constantine V as a child on the reverse [733], and Class III has Constantine older, sometimes but not invariably with a C in the obverse field and an I in the reverse one [734], the two forming together the first letters of Σικελία. There is considerable variety in the style of the coins and their quality of workmanship, as if the mint were on occasion having to fall back on the aid of die-sinkers from outside. Semisses [741] and tremisses exist of both classes, and there are mules within Class III linking an obverse with a letter in the field with a reverse that lacks one, or vice versa [745].

No Sicilian coinage is known of Artavasdus. The solidi of Constantine V, which are relatively common, are all of a single type, having the bust of himself and his son on the obverse and that of his father on the reverse, so that they all must be post-751 in date, but they differ in the depiction of Leo IV's age and in sometimes having a Θ or a labarum in the reverse field [735–6]. The corresponding semisses [742] and tremisses [746] have only a single bust on the obverse, presumably for reasons of space. For Leo IV only a single semissis, with the clear inscriptions L EONPA and C ONSTA (Spahr 337A), is known, and there are probably solidi still to be identified.

There follows, apparently, a gap of twenty years, with minting resumed under Irene, of whom there are solidi of slightly varying types giving her the titles of *Agousta* and *Basilissa* [737]. For the joint reign of Nicephorus I and Stauracius [738], for Michael I alone, and for Michael I and Theophylact [739, 743] there are solidi and fractions, but the coins resemble each other so closely that they can only be properly attributed when enough of the inscription is legible, which is often not the case. Only with Leo V are the inscriptions once again normally on the flans, Leo being styled *basileus* and his son Constantine being without title. On one class of the coins the co-emperors are further identified by a Λ in the obverse field and a K in the reverse one [740, 744]. There are also coins with a cross in the field.

### Sicily: copper coinage (Pl. 41)

The copper coinage of Sicily includes the bulk of that which Wroth characterized as provincial. Most of the coins are without mint-mark, though SCL occurs on two issues of Leo III, CIK' (for Σικελία) on coins of Leo IV, and CI on coins of both Leo III and Leo V. The attribution of the others to Sicily is based in part on their stylistic affinities with those having mint-marks, in part on their being commonly found on the island. Minting seems to have been highly irregular, and there are fairly long periods to which no coins can be

attributed: the entire reigns of Artavasdus, Constantine VI and Irene, and the early years of the reign of Leo IV. Some of these gaps may in due course be filled, but the extreme commonness of some issues and the rarity of others suggests that the coins were struck from time to time as they were needed, without any attempt at regularity of output.

The design and workmanship of the coins are usually poor, and the products of the mint show nothing approaching the originality and variety displayed during the preceding century. The heads of the figures are grossly out of proportion to the rest of the body and the dies almost invariably too large for the flans, so that large parts of the inscriptions are normally missing. Originality was practically limited to the vertical arrangement of the inscriptions, the early abandonment of the mark of value, and the use of the title *despotes* well before it appeared on the coinage of Constantinople.

The earliest issues of Leo III are rare. Of Leo III alone, before the association of Constantine V on the throne, there is only a follis of the traditional pattern, with the standing figure of the emperor on the obverse and an M between two palm branches on the reverse; it is identified by a monogram above the mark of value [747]. The folles struck after 720 are of two types, the first, of which only a single specimen is known [748], continuing the previous type but with two busts on the obverse, the second following the pattern of the folles of Constantinople, with Leo's bust on the obverse and that of Constantine above the mark of value on the reverse, the mint being identified by SC L' on either side of the M [749]. There is for the latter issue the same wide variety of size as in the issues of the capital. The module varies from 16 mm to 24 mm and the weight from c. 3 g to c. 6 g. Finally, in the 730s, a new design was devised, with the standing figures of Leo (bearded) on the obverse and Constantine (beardless) on the reverse, each wearing a chlamys and holding in his hand an akakia vertically in front of him [750]. The costume and insignia are those of the busts of the two emperors on Leo's later folles of Constantinople, but the figures are on different sides of the coin instead of being placed side by side. Each is identified by a vertical inscription in large letters: ΛΕΟΝ ΔΕCΠ and ΚΩΝΣ ΔΕCΠ.

These coins, which are fairly common, set the pattern of Sicilian issues for the next fifty years. There are rare folles of the first decade of Constantine V's reign showing his standing figure, with ΚΩΝΣ ΔΕCΠ, on both sides (Spahr 322). Two types were struck later, the first [751] imitating the last issue of Leo III and showing Constantine V in association with his son Leo IV (ΛΕΟΝ ΝΕΟV) only, the second [752] falling into line with Constantinople and having on the obverse the crowded figures of Constantine V and Leo IV (identified by K and ΛΕΟΝ or ΛΕΩΝ) and on the reverse the figure of Leo III holding, as on the solidi, a cross potent on base (ΛΕΟΝ ΔΕCΠ). Specimens of both issues are common. There is also a rare half follis [753] of the same period, the obverse type showing two busts above an exergual line with CIK (?) below, the reverse a single bust with Λ (for ΛΕΟΝ) below. This phase of Sicilian coinage ends with folles of Leo IV, copied from the second class of his Constantinopolitan issues, having the seated figures of Leo IV and Constantine VI on the obverse and the busts of Leo III and Constantine V, with CIK' in the exergue, on the reverse [754].

There is, then, so far as our knowledge goes, a break of nearly two decades in the issue of folles. When work was resumed at the mint after 802 the type was quite different, being based on that of the solidus and having a facing bust on both sides of the coin. The emperors are in each case identified by a few large letters in the field. The bust on the obverse usually wears a loros and holds a cross potent on base; that on the reverse usually wears a chlamys and holds a globus cruciger. This pattern was followed by Nicephorus I alone (NIKH on both sides), Nicephorus and Stauracius (N IKH and STAVP [755] or N ΔΕC and CTAV [756]), Michael I alone (M IXA on both sides [757]), Michael I and Theophylact (MIXA, ΘΕ ΟΦVΛ [758]), and Leo V and Constantine (Λ ΕON, K ONC [759]). Under Leo V the formula began to break down: the second issue [760] has a star on the obverse and C I in the reverse fields, a third [761] has an Λ and cross on the obverse and a K and cross on the reverse, in both cases coupled with small changes in the form of the imperial names; finally, the two busts are transferred to the obverse and the emperors' initials, a large ΛK, occupy the whole of the reverse of the coin [762]. It is possible that this last class includes both folles of *c.* 3 to *c.* 5 g and half folles of *c.* 1.5 g to *c.* 2 g; there are at least considerable divergences in the weights of the heavy and the light coins, with a tendency to cluster round these figures. Nothing is known of Sicilian history during Leo V's reign that can explain or justify so various and abundant a coinage, but neither the types nor the style make it likely that any of the issues belong to one of the Leo-Constantine reigns of the eighth century.

Little that is useful can be said about the weight pattern of the Sicilian folles, and nothing is known of their relationship to the solidus. The variations in weight under Leo III have already been noted, and a marked lack of uniformity occurs at other periods as well. The common folles of Constantine V with standing figures usually weigh between 2.5 g and 3.5 g, as do those of Leo IV. The revived follis of Nicephorus I tends to be heavier – one recorded specimen exceeds 6 g in weight – but those of Michael I are usually 2 g or less. Leo V's are back to a normal figure of between 2.5 g and 3.5 g, but isolated specimens of most groups are found weighing over 5 g and the ΛK type is definitely heavier than the others (*c.* 4 g to *c.* 5 g), with the possibility, as noted already, of the existence of half folles. It is difficult to see any pattern in all this. Presumably the mint was given a figure for the number of coins to be struck to the pound, and a closer analysis might allow one to say how this was changed from time to time, but since the coins would have been accepted by tale and their value as coin was well above their value as metal the precise weight of individual specimens was of little consequence.

### Italian coinage (Pls 39, 40)

Byzantine coinage on the Italian mainland practically came to an end in the course of the eighth century, since Ravenna was lost to the Lombards in 751 and Rome seems to have been formally subjected to papal sovereignty in the late 770s. In contrast to the coinage of Sicily it

is almost entirely one of what passed for gold, all of it badly debased and in the case of some Roman issues reduced from electrum to copper or even potin, such coins being perhaps gilded before being put into circulation. In contrast again to Sicily, there were no semisses, only solidi and tremisses. Apart from RM or R on some coins of Rome there are no mint-marks, but the products of the mints of Rome and Ravenna have by this time such clearly marked stylistic peculiarities that they are easy to identify. Some of the coins bear indictional dates.

#### RAVENNA

The coinage of Ravenna is practically limited to the reign of Constantine V, and so far as we know consists entirely of tremisses. For Leo III there are three classes, all extremely rare, Class I having as reverse type a cross potent [703], Class II a facing bust of Constantine V as an infant [704], and Class III an older bust of Constantine with the indictional date I (= 741/2). For Constantine V there are only two types, one [705] having the facing busts of Constantine V and Leo III side by side, Constantine being beardless but in the senior position, and dated IΔ (= 745/6), the others having a facing bust of Constantine only and dates IΔ, IЄ [706], A (sometimes surmounted by a cross) and B, i.e. 745/6–748/9. The coins are only about 8 carats fine and often grey or black in colour owing to the corrosion of their silver content; indeed, they have sometimes been published as silver. Solidi and folles may yet be found, since dated specimens of both these denominations, as well as of tremisses, were struck by the Lombard king Aistulf after his capture of Ravenna in 751.

#### ROME

The coinage of Rome consisted almost entirely of solidi and tremisses, although some of the anonymous 30-nummus pieces of billon [see p. 143; 723] may belong to the early Isaurian period. The only silver coins known are small ones of Leo III having on the reverse the monogram of Pope Gregory III [722] and ones of Constantine V with his initial, linked with a cross [724]. The 'gold' coins are stylistically very uniform, with deeply cut lines and curious letter-forms, notably a tall and narrow A and a very broad T having a short vertical stroke and an abnormally long horizontal one. Nearly all have a variety of letters or symbols in the reverse field, some of which are certainly indictions, e.g. IЄ (= 731/2) under Leo III and IB (= 742/3) under Artavasdus, and others may be, though it cannot be regarded as certain. Some of Artavasdus' coins are muled with ones of Constantine V. The latter's early coins have a single bust identical with that used for Leo III [711, 718]. Subsequently, after 751, there were two-bust coins having a *Manus Dei* between the head of Constantine V and Leo IV [712], and then coins of steadily declining fineness and slovenly designs with the bust of Leo III on the reverse. The series ends with coins bearing the name and effigy of Leo IV on both sides [714, 721], presumably struck early in 776, when the news of Constantine V's death

Table 8 Symbols on coins of Rome, 717–76

Symbols	DOC class	Solidus	Tremissis	Symbols	DOC class	Solidus	Tremissis
Leo III alone				Artavasdus and Constantine			
L *	Ia	[707]	X	* *	I	X	
Γ *	Ib	[708]		Artavasdus and Nicephorus			
* Δ	Ic	X		* *	II	[710]	X
Leo III and Constantine V				I B	III		X
* *	IIa	X	[715]	Constantine V alone			
R M	IIb		[716]	* R	I	[711]	[718]
* *	IIc		X	Constantine V and Leo IV (busts together)			
* *	IIe	X		* R	IIa	[712]	X
€ *	IIId	X		R M	IIb		[719]
* R	IIe		X	(Leo IV on rev.)			
* A	IIIf		X	B	IIIa		X
* B	IIIg		X	Γ	IIIb	X	
* Γ	IIh		X	Δ	IIIc	X	X
* Δ	IIi	[709]	X	R	IIIe	X	X
* €	IIj		X	I A	IIIe	X	X
* *	IIk		[717]	* *	IIIIf	X	[720]
* Z	III	X	X	I Δ	IIIg	X	X
* H	IIIm	X	X	I €	IIIh	[713]	
* Θ	IIIn	X	X	R I			
* I	IIo	X	X	Leo IV alone			
* €	IIp	X	X	R I		[714]	[721]
A +	IIq	X	X				
None	IIr		X				
* *							

An X, replaced by a numeral in square brackets where a coin is illustrated, indicates which denominations are known.

reached the city. Whether the coinage was discontinued in 776, or whether it lasted down to Charlemagne's visit to Rome in 781, we do not know. The papal coinage that succeeded it, although consisting of silver deniers corresponding to those of the Frankish kingdom, is strongly Byzantine in appearance, with a facing bust of Pope Adrian I on the obverse and a cross on steps, accompanied by a *Victoria Dmn* inscription and even CONOB, on the reverse.

The letters and symbols on Roman coins of the period are set out in Table 8, the references being to the classification used in *DOC* 2.



## NAPLES AND OTHER MINTS

The rare Neapolitan solidi and tremisses carry on from those of Theodosius III, being of poor metal and characteristic aspect and, in the first two issues of Leo III, having a star in the reverse field. Leo's coins are of three classes, showing him wearing a loros [726, 727] or a chlamys [728, 729], and, in Class III, having the bust of Constantine V on the reverse and a conspicuous Λ and K in the obverse and reverse fields respectively [730]. *DOC 2* doubtfully attributes to Naples a few coins of Constantine V, including a silver one having Roman affinities [725], but they are perhaps better regarded as of uncertain mints. The condition of what remained of Byzantine Italy at that time could easily have resulted in occasional minting by local authorities, though in the emperor's name. The latest of such aberrant issues are solidi struck in the early ninth century in the names of Nicephorus I and Stauracius [731] or of Theophilus [854, 855; see pp. 185–6]. For both of these, however, a plausible attribution to Naples can be made out, since they clearly belong together and the inscriptions in the first series sometimes end with ΝΕ or ΗΕ.

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# THE AMORIAN AND EARLY MACEDONIAN DYNASTIES, 820–969

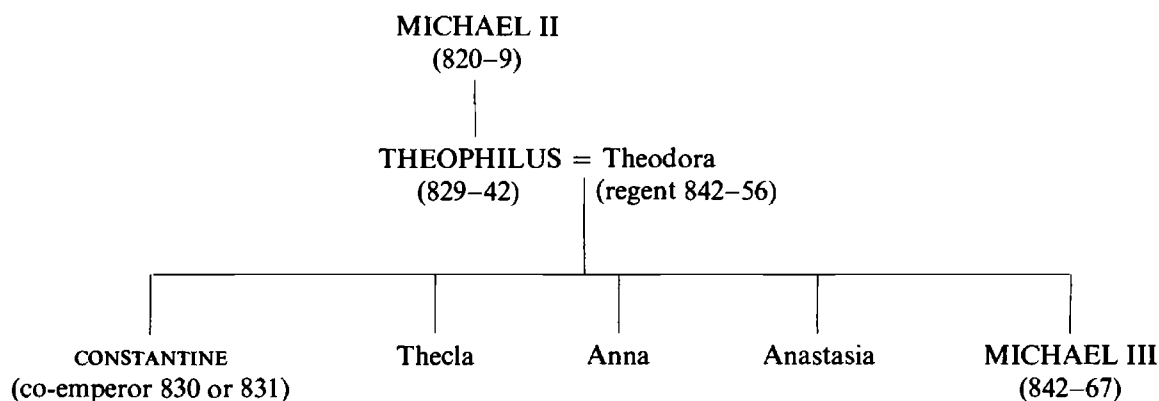
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## General features

The period of the Amorian dynasty, which lasted from 820 to 867, has many features in common with that of the Isaurians. Its coinage, however, which saw the introduction of the heavy copper follis by Michael II and the replacement of the traditional follis mark of value by a four-line inscription under Theophilus, is closer to that of the Macedonians. The latter dynasty formally ruled from 867 to 1056, but for the numismatist its history falls into two distinct periods, since important changes in the coinage took place between *c.* 965 and 970. Nicephorus Phocas, who came to the throne in 963, created a new gold coin, the tetarteron, whose introduction heralded the end of the traditional nomisma, and his successor John Zimisce introduced in 970 the so-called Anonymous Folles, a series of copper coins with purely religious types which made no allusion to the reigning emperor. It is therefore convenient to group the coinage of the early Macedonians with that of the Amorians and the coinage of the later ones with that of their successors down to 1081.

The sovereigns whose reigns covered the period 820–969 were effectively ten in number, though if all those whose names or effigies appeared on the coins were included the figure would be doubled. It is difficult to draw up a satisfactory list, for those who were nominally the senior emperors were not always the effective rulers, and the rules of protocol often went by the board in the arrangement of names and imperial effigies on the coins. The reigns were as follows, the complicated interrelationships involved being set out in Tables 9 and 10.

Table 9 The Amorian dynasty

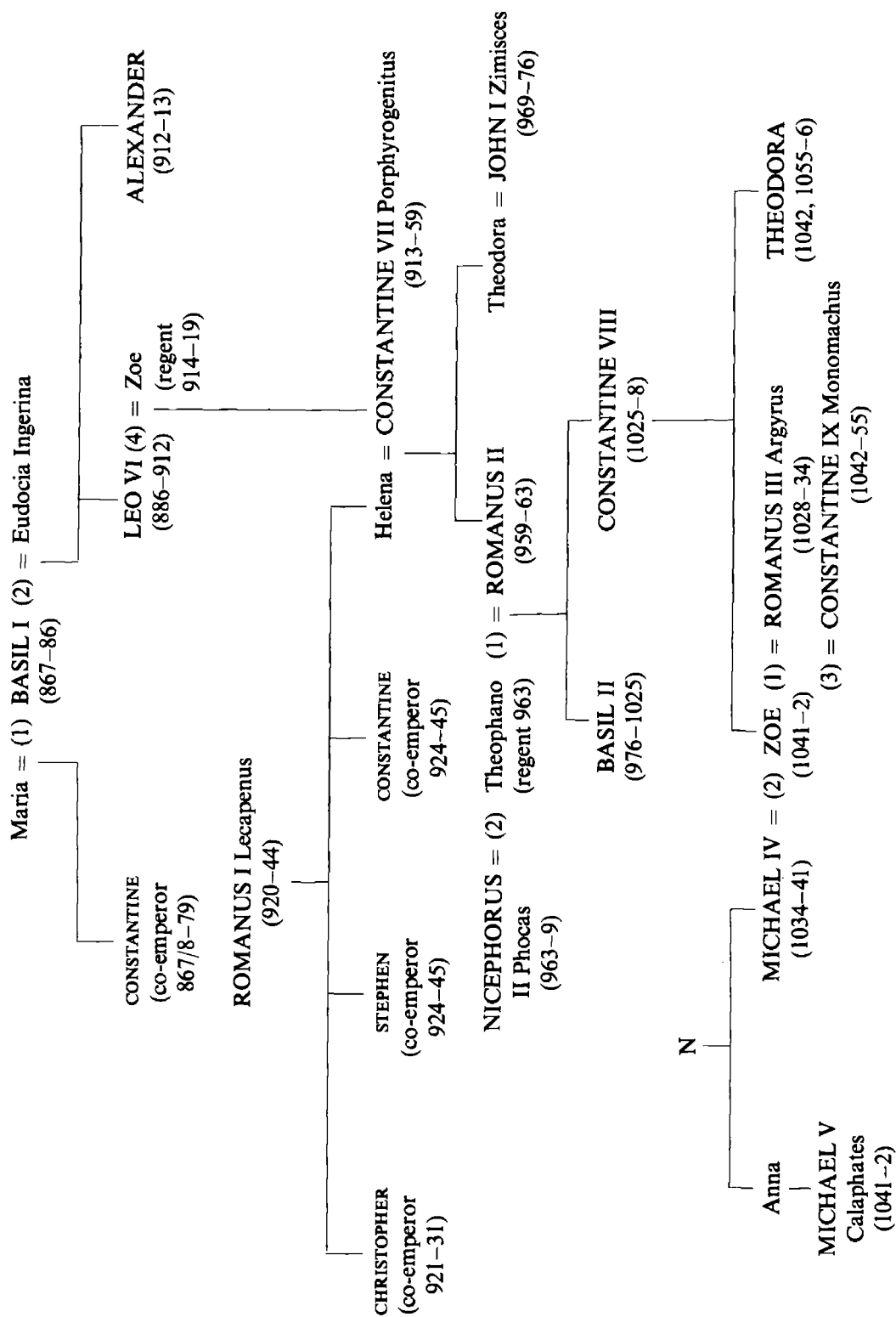
*Amorians*

Michael II	820–9	(with Theophilus from 821 or 822)
Theophilus	829–42	(with Constantine in 830 or 831, with Michael III from 840)
Constantine	830 or 831	
Michael III	842–67	(with his mother Theodora 842–56, with Basil from 866)

*Macedonians and Lecapeni*

Basil I	867–86	(with his son Constantine 867/8–79, with Leo VI from 870 and Alexander from 879)
Constantine	867/8–79	
Leo VI	886–912	(with Alexander from 886, with Constantine VII from 908)
Alexander	912–13	(nominally with Constantine VII)
Constantine VII	913–59	(with his mother Zoe 914–19, with Romanus I and family 920–45, with Romanus II from 945)
Romanus I Lecapenus	920–44	(with his sons Christopher 921–31 and Stephen and Constantine from 924, the latter ruling as co-emperors for a year – 944–5 – after his deposition)
Romanus II	959–63	
Basil II and Constantine VIII	963	(with Theophano as regent)
Nicephorus II Phocas	963–9	(nominally in association with Constantine VII's sons Basil II and Constantine VIII)

Table 10 The Macedonian and Lecapenus dynasties



In the Amorian period there were multiple appearances of co-rulers on the coins under both Theophilus and Michael III. The former had a son named Constantine who was formally associated Augustus but predeceased his father, and he had also three daughters who appear as Augustae in company with their mother Theodora on one issue of ceremonial *solidi* of the late 830s. He also, on an extensive issue of *solidi*, revived the Isaurian practice of emphasizing his dynastic claims by placing his father on the coins, but on his last coinage this numismatic commemoration of deceased members of the dynasty was abandoned and the emperor is shown associated only with his son Michael III. The minority of the latter saw the issue of coins on which he is associated with his mother Theodora and his sister Thecla, and on the *folles* of his last year he is associated with Basil, a court favourite who started life as a groom in the imperial stables and who, having murdered Michael in 867, founded the Macedonian dynasty, so-called from a spurious genealogy which connected it with Alexander the Great.

Basil I on his coins associated with himself at various times his three sons: the eldest, Constantine, who predeceased him; Leo VI, who was perhaps a son of Michael III and whom he detested; and Alexander. He also minted rare coins showing his wife Eudocia Ingerina, who had earlier been Michael's mistress. In the next two reigns there were no such complications: Leo VI and Alexander were on bad terms with each other, so that Alexander plays a minor part on the coinage of Leo, and Leo's son Constantine VII Porphyrogenitus, although titular emperor from 908, played no role at all on that of Alexander. Under Constantine VII there were renewed problems resulting from the ambitions of Romanus I Lecapenus, admiral of the fleet and an able and unscrupulous politician. Romanus forced Constantine to accept him as co-Augustus in 920 and then promoted three of his sons successively to the same rank, Christopher in 921 and Stephen and Constantine in 924. It seemed indeed for a time that the house of Lecapenus would replace the Macedonian dynasty. But Christopher died in 931, leaving his father heartbroken; Stephen and Constantine deposed their father in 944; and finally in 945 a popular reaction in favour of the downtrodden Constantine VII disposed of Stephen and Constantine Lecapenus, who joined their father in the monastery to which they had ungratefully relegated him a year previously. After only a brief delay Constantine VII associated his own son Romanus II as *basileus*, but Romanus II's sole reign lasted only four years (959–63). His widow Theophano married a distinguished but puritanical soldier, Nicephorus II Phocas, who shouldered to one side Romanus' children Basil and Constantine, and when in 969 Nicephorus was murdered by John I Zimisce the new emperor did not even accord them the minimal recognition they had received from Nicephorus. But John, like his predecessor, found it expedient to ally himself by marriage with the Macedonian house, and when he died without heirs in 976 the throne reverted finally to the sons of Romanus II.

The external appearance of the coinage changed greatly during the period. The final condemnation of Iconoclasm in 843 made possible a revival of religious types for the gold, on which they had been virtually absent since 720, and Theodora's placing of an effigy of Christ

on the solidus was an innovation that was to prove permanent. Henceforward a bust or a seated or standing representation of Christ, or of the Virgin or one of the saints, was to be a feature of the vast majority of the gold coins, and often of those of other metals, down to the end of the Byzantine Empire. The seated Christ introduced by Basil I in 867 and continued with only minor variations for eighty years (to 945) led to the solidi being sometimes called *senzata* (from σένζος, *sessus*, 'throne'), but this was subsequently displaced by the more familiar image of Christ Pantocrator, the bust of the Saviour clasping in his left hand the Gospel Book and with his right hand raised, in the sling of his cloak, in a gesture of benediction. Theophilus' revival of the occasional issue of ceremonial coins, a practice continued under his successors, makes a welcome change from the unimaginative plainness of Isaurian solidi. It was also under Theophilus that the silver miliaresia became fully part of the circulating medium. The changes Michael II and Theophilus made in the appearance of the follis have already been noted.

Most emperors continued to be shown on the coins in a quite impersonal fashion, as in the Isaurian period, but Leo VI introduced a characterized bust, long-bearded and venerable, for a rare issue on which the Virgin replaced Christ as the obverse type [776]. Constantine VII used a very similar portrait of himself – the family likeness is evident – half a century later [786]. There are also busts of Romanus I [803, 824], Romanus II [789] and Nicephorus Phocas [791, 827] which can be considered portraits, but such coins remain exceptional: it is clear that convention still favoured iconographic anonymity.

The regular imperial costume remained the chlamys or the loros, but an important innovation occurred in the design of the latter. Instead of always having the form of a long scarf wound round the body in a complicated fashion, giving rise to the familiar lozenge-pattern on the coins, it now sometimes has the appearance of a length of richly decorated material, patterned in squares, hanging straight down in front from the neck and shoulders [785]. A similar but much longer piece of cloth hung down behind, but instead of forming a train it was gathered up at the wearer's right side and then, when it is visible on a standing figure, was shown as passing across the front of the body to hang over his left forearm, as the old loros had done. This modified loros first appears on the solidus during Constantine VII's reign, but the contrast between the old and the new forms is already apparent on Class 3 of the folles of Basil I [815, 816]. Other elaborate forms of ceremonial dress also occur from time to time [789; on the junior emperors, 784].

There were a few innovations in the imperial titulature on the coins. *Augustus*, shortened to *aug* or *augg* in the plural, enjoyed a return to favour after having been long displaced by *basileus* or *despotes*, while Alexander and several of his successors styled themselves *autokrator* and Constantine VII on one issue *porfirogen(itos)*. *Pistos* ('faithful') was introduced as an epithet by Theophilus and remained popular with his successors, but *megas* ('great') was used only by Michael III and *eusebes* ('pious') by Leo VI. Michael III and Basil are, on their rare folles, exceptionally termed *imperator* and *rex*. This seems to have been intended as a demonstration of the knowledge of Latin in the imperial court, for a contemptuous

reference by Michael III to this language as ‘a barbarian and Scythian tongue’ in a letter to Pope Nicholas I had invited the biting retort that it was ridiculous for the emperors to call themselves ‘Roman’ if they were ignorant of Latin (*quia ridiculum est vos appellare Romanorum imperatores et tamen linguam non nosse Romanam*).

The chief mint was, as usual, Constantinople. Minting in Sicily, after very abundant issues under Theophilus, contracted sharply under Michael III and ceased entirely under Basil I, presumably after Syracuse had fallen to the Saracens in 878. Some solidi of Theophilus of very crude workmanship have been doubtfully attributed to Naples, and both Naples and Capua struck silver denari in the name of Basil I, but these belong to the western coinage pattern and cannot be regarded as true imperial issues. Cherson began to mint again under Michael III and issued cast coins of base metal for just over a century under circumstances that are largely obscure. At least one group of Theophilus’ folles is provincial in origin, and the same may be true of some rare issues of Basil I and Leo VI. Control marks are still used on solidi of Theophilus (see p. 178), and it is possible that an unbarred A was still being used as such on solidi of Michael III and Theodora. But it seems to have become confused with the final A of *despoina* and in any case it had no successors. Not until the eleventh century do any marks that can be construed as intended to identify officinae begin to appear again on Byzantine coinage.

### Constantinople: solidi (Pls 42, 43)

Michael II’s gold coinage is essentially a continuation of that of his predecessors. On the very rare solidi of his sole reign [763] his bust appears on both obverse and reverse, while on those of his joint reign with Theophilus [764] that on the reverse is replaced by a much younger bust of his son.

With the reign of Theophilus a new era begins, his regular issues being from time to time supplemented by the striking of ceremonial coins of extreme rarity, but despite the work that has been done on them the chronology of both the reign and the coinage remain uncertain. He had a son named Constantine who predeceased him, and another, Michael III, who succeeded him. A monogram on one of the doors of Saint Sophia fixes the date of Michael’s birth as 9 January 840, and he was certainly created Augustus before the end of the year. Constantine was probably born after Theophilus’ accession and almost immediately created Augustus, but he died soon afterwards. We can assign no exact date to any of these three events.

The substantive coinages of the reign are at least two in number, and probably three. One [765], datable to 829/30, has on the obverse a bust of Theophilus wearing loros and holding globus cruciger and cross-sceptre, while the reverse has a patriarchal cross on steps with the inscription CVRIE BOHΘH TO SO ΘOVLO, i.e. Κύριε βοήθει τῷ σῷ δούλῳ (‘O Lord, preserve thy servant’). The other [767], much commoner and datable to 831–40, has for

obverse type the cloaked bust of Theophilus holding patriarchal cross and akakia, while the reverse shows the two busts of Michael II (bearded) and Constantine (beardless). The order of issue of the two classes, which has been disputed, is determined by the control letters: on the type with Theophilus alone this is almost invariably €̄, as on solidi of Michael II, while on those with Theophilus, Michael II and Constantine it has been changed to Θ̄. Since the Isaurians had never shown a junior emperor, or indeed any living emperor, side by side with a deceased one, it seems reasonable to assume that the second coinage was struck only after Constantine's death.

There are two, or perhaps three, types of ceremonial solidus, all very rare. The earliest [766], of 830 or 831, marks the transition between the two main types of the reign. It has on the obverse a bust of Theophilus wearing a chlamys and holding a patriarchal cross, the emblem which on the first main class of solidi had formed the reverse type, while its reverse depicts Constantine as an infant. Its rarity and type indicate that it was intended to do honour specifically to Constantine, and one may fairly assume that it was struck on the occasion of his coronation. The second and much more remarkable coin [768] has on the obverse the three facing busts of Theophilus, his wife Theodora and his daughter Thecla, with on the reverse the busts of his younger daughters Anna and Anastasia. A fourth daughter, Maria, married to a certain Alexius Musele who had been created Caesar and was for a time Theophilus' intended successor, is not shown, which probably indicates she was dead at the date, presumably sometime in the late 830s, when the coin was issued. Finally, there is one remaining type of solidus [769] showing on the obverse the facing bust of Theophilus and on the reverse that of Michael III as a child. Its extreme rarity would point to its being ceremonial in character. On the other hand, it is hard to suppose that the coins with Michael II and Constantine continued to be struck after Michael III's coronation. While we cannot be certain, it seems best to assume that it was struck from Michael III's coronation onwards.

Theophilus died in January 842, and a year later, in March 843, the decision was taken to restore images. The three Augusti were technically Michael III, Theodora and Thecla, as we know from the literary sources as well as from the coins. The first of the three types of solidus issued during the reign has on what was technically the reverse the busts of Michael and Thecla, and on the obverse that of Theodora alone [770]; she is the only one who is given a title in the inscription, and the size of her bust would make it clear that in fact, if not in form, she was the most important person in the government. The second issue [771] can be dated 843–56 and revives the type of the second coinage of Justinian II with the bust of Christ; in both cases there is only a cross behind the head of Christ, not the more usual nimbus, which shows that the imitation was a conscious one, though the inscription is reduced to a simple *IhS̄QS̄ XRISTOS*. Finally, in 856, Michael III acquired sole rule for himself, and his mother disappeared from the coins [772]. His insignia of rule are a labarum and an akakia, the first time that the labarum was used on gold of this period.

Basil I's solidi are of three types. The first [773] is extremely rare, and was probably issued



very briefly after his accession. It has on the obverse a crudely designed figure of a seated Christ, and on the reverse a standing representation of himself, wearing a *loros*. Both were innovations: a seated Christ had never been used on the coinage, and a standing figure not since the reign of Justinian II. This type was succeeded by the main one of the reign [774], in which the emperor's standing figure is replaced by the busts of himself and his eldest son Constantine. Whether its issue was continued after Constantine's death in 879 we do not know. If it was not, the only *solidi* of his last years would be very rare coins [775] having on the reverse his wife Eudocia and his son Constantine, which were perhaps a memorial coinage issued after Eudocia's death in 882.

Leo VI's *solidi* are even more anomalous than these of Basil, for he does not seem to have minted at all in gold during the first two decades of his reign. His earliest *solidi* [776], which are extremely rare, show his bearded portrait and a bust of the Virgin, the latter perhaps representing the image of the Theotokos in the church of the Pharos where he was married. They were probably struck between the emperor's fourth marriage in 906 and the coronation of his son Constantine in 908. His second series, struck during the last four years of the reign, consists of fairly common *solidi* [777] in which he is associated with Constantine, who is shown much older than he really was.

Alexander's *solidi* [778] are of extreme rarity, as one would expect of so brief a reign, and show him being crowned by his name-saint Alexander, a fourth-century bishop of Constantinople. It is the first representation of a coronation scene on Byzantine coinage, and the coins are also the first on which the emperor is given the title of *autokrator*. There is at Dumbarton Oaks a unique *solidus* pattern in silver, with the emperor's bust between *h* and *o* (for *basileus* and *despotes*).

The *solidi* of Constantine VII's long reign, if one includes patterns and coins struck in the names of his many colleagues, form no fewer than fifteen classes. Most of them can be dated without too much difficulty, though it is possible that at times several classes were being struck contemporaneously and that they did not follow each other consecutively. The most important of them are illustrated on Pl. 43. The obverses include the new and much more elegant seated Christ of Class X [785] – which some scholars place much earlier in the reign than the dates 931–44 to which I would assign it on the ground of the small size of the letters in the inscriptions – and a bust of Christ Pantocrator. The latter, which dominates the coinage for the next hundred years, starts in 945 with a type showing a portrait bust of Constantine. The reverse types vary from a banal representation of two imperial busts [780, 781, 783, 787, 788] to much more elaborate ones showing Romanus I with Constantine VII and Christopher [782, 784], or Constantine with Zoe [779] or with Romanus I [785] or alone, long-bearded like his father and wearing a gorgeously designed *loros*, sometimes holding an *akakia* (Class XII) but more often not (Class XIII) [786]. The order of precedence of the figures, and of the names in the inscriptions, reflect with some fidelity the political relationships of the co-emperors at different periods in the reign.

The *solidi* of Romanus II, which show a bearded portrait wearing an elaborate robe [789],

are of extreme rarity: only three specimens, of two slightly differing types, are known. Nicephorus II, on his first issue [790], reverted to the two characterless facing busts of so many previous reigns, but subsequently replaced them with a type [791] showing himself and the Virgin, likewise setting a pattern for future issues. This phase of Byzantine coinage ends indeed with nomismata showing John I being crowned by the Virgin and usually – though not invariably – holding a long cross or patriarchal cross [792]. Nicephorus also inaugurated, and John continued, a light-weight nomisma, the so-called tetarteron, but the history of this denomination is best reserved for the next chapter.

### Constantinople: miliaresia (Pl. 44)

Byzantine silver coinage, during the period 820–969, underwent surprisingly few changes. The types remained basically the same – a five- or six-line inscription on the obverse, a cross potent on steps on the reverse – but the details became more elaborate. New epithets were incorporated in the inscription, the cross became more complex in design, and the border on the obverse ended by being decorated with globules in Muslim fashion. The weight pattern was modified. The Isaurian miliaresion had probably been struck 144 to the pound, with a theoretical weight of 2.27 g (see p. 161). There was a temporary increase under Theophilus to c. 3.4 g, but his later coins are of the traditional weight. Under Basil I, however, there was a permanent increase, apparently to a theoretical weight of 3.03 g or 108 to the pound, and it is in the tenth century that we first have records showing that 12 miliaresia were reckoned to the nomisma.

Michael II's coins [793] do not differ from those of his predecessors, but Theophilus introduced several novelties. His coins are the first to be struck in the name of a single emperor, not in those of two colleagues, showing that they had lost their nominally ceremonial status and were now fully accepted as a regular part of the monetary system. No fewer than five classes were struck during his reign, three in his name alone and one each in association with Constantine or with Michael III [796]. At first he styled himself simply  $\Theta\epsilon\phi\iota\lambda\omicron\varsigma\ \beta\alpha\varsigma\iota\lambda\epsilon\upsilon\varsigma\ \rho\omicron\mu\alpha\iota\omicron\nu$ , as previous emperors had done, but later, on the main issue of the reign [794], he took the title of 'servant of God', as on his solidi, and  $\pi\iota\sigma\tau\omicron\varsigma$  ('faithful'), as he had done on the miliaresia on which he was associated with Constantine:  $\theta\epsilon\omicron\lambda\omicron\varsigma\ \chi\rho\iota\sigma\tau\omicron\varsigma\ \pi\iota\sigma\tau\omicron\varsigma\ \epsilon\kappa\ \alpha\upsilon\tau\omicron\ \beta\alpha\varsigma\iota\lambda\epsilon\upsilon\varsigma$  ('servant of God and faithful, in Him Emperor of the Romans'). On his third issue [795] as sole emperor he contented himself with  $\pi\iota\sigma\tau\omicron\varsigma$ , which remained normal in the future. Michael III struck three classes, one in company with Theodora and Thecla and the other two alone. On his last issue [797] he called himself, rather inappropriately,  $\mu\epsilon\varsigma\alpha\varsigma\ \beta\alpha\varsigma\iota\lambda\epsilon\upsilon\varsigma\ \rho\omicron\mu\alpha\iota\omicron\nu$  ('great Emperor of the Romans'). The same issue has beneath the steps of the cross a small dot, subsequently replaced by a large globule.

Small changes continued to occur under the first Macedonian emperors. Basil I's

miliaresia, which were all struck in association with his son Constantine [798], are chiefly notable for the weight increase already alluded to. Leo VI, in direct imitation of the Abbasid dirham, introduced eight globules on the triple-dotted border of the obverse [799]; he also added εὐσεβής ('pious') to his list of epithets and replaced ΕC ΘΕΥ by ΕΝ ΧΩ ('in Christ'). Alexander assumed the title of αὐτοκράτωρ on his silver as well as his gold, and inserted a medallion with a bust of Christ on the centre of the cross [800].

During the long reign of Constantine VII the chief interest of the miliaresia, as of the solidi, is the way in which they reflect the changing combinations of emperors. No miliaresia were struck bearing the name of Zoe, but there are rare coins in Constantine's own name [801], with the title of *autokrator*, which are best assigned to 914–21. During the co-rulership of Christopher (921–31) there were two issues, one with the emperors' names in the order Romanus I/Constantine VII/Christopher, the other in that of Romanus I/Christopher/Constantine VII [802], though whether they succeeded each other or were struck contemporaneously we do not know. In 931, when Christopher's death made a new coinage necessary, the mint envisaged a complete breach with tradition: the replacement of the five-line inscription on the obverse by a remarkable portrait bust of Romanus I [803]. The design was not approved, and only two copper patterns have survived, one in London and the other in Leningrad. Instead, on the miliaresia struck between 931 and 944 [804] on which the names of Stephen and Constantine Lecapenus were added to those of Romanus and Constantine VII, Romanus had to content himself with placing his initial letters in the field and his bust in a medallion at the centre of the cross. This substitution of the imperial effigy for that of Christ, as on the coins of Alexander, is a striking commentary on the manner in which the emperor was regarded as the living representation of the Godhead. The obverse has also an ornament above and below the inscription, a feature to be greatly developed in the future. Finally, on the last issue of the reign [805] struck in association with Romanus II, Constantine VII assumed the title of *porphyrogenitus* ('born in the purple'), thus emphasizing his legitimacy against the 'usurpers' of the Lecapenus family, and substituted an elaborate cross crosslet for the traditional cross potent of the reverse type.

No miliaresia are known of Romanus II, but Nicephorus I [806] and John [807] revived the device of a medallion portrait and exploited the possibilities of the miliaresion as a medium of propaganda by both using the title of *autokrator* and pointedly omitting the names of their nominal colleagues, Basil II and Constantine VIII.

### Constantinople: folles (Pls 45, 46)

The transition to the dominant type of follis of the Amorian and early Macedonian periods was made in the reigns of Michael II and Theophilus, i.e. between c. 825 and c. 835. Michael II's early folles [808] are coins about 22 mm in diameter and weigh c. 5.5 g; his latest ones [809] are 28 mm in diameter and weigh c. 7.5 g. The type of both, however, is the same. Theophilus

introduced a new type having on the obverse his half-figure, the first of a varied sequence of imperial representations which replaced the almost unbroken series of facing busts of the Isaurians and was to last until 969, and he brought a still longer phase of Byzantine coinage to an end by abandoning the M of the reverse type in favour of a four-line inscription. Similar inscriptions were with a single exception [812] to form the standard reverse 'type' for the next two centuries, for even after 969 they were continued by the earlier classes of Anonymous Folles.

During the whole period the copper coinage was abundant and in the main well-designed and carefully produced. Only under Constantine VII and his immediate successors was there a good deal of restriking on old flans, a phenomenon which usually meant that the price of copper was rising and the mint finding difficulty in covering its costs. The weights of the coins were in general little regulated and exhibit wide discrepancies. In a hoard from south Italy which must have been buried c. 920 the folles of Constantine VII and Zoe (914–20) vary in weight from 4.2 g to 10.8 g, though they are in good condition and virtually unworn.

The pattern of striking, where the names and effigies of individual emperors or groups of emperors is concerned, is often quite different from that obtaining on the gold and silver. Michael III's solidi and miliaresia were minted either in his name alone or in association with his mother or sister, while his meagre copper coinage was minted only in association with Basil, at the very end of his reign. Folles of Leo VI, Constantine VII and Romanus I are very common, while solidi of Leo VI and Constantine VII alone are rare, and none of Romanus I alone exist at all. On the other hand, there are no folles of Romanus I in association with Christopher, while solidi in their joint names are common. The existence of rare folles of Theophilus and Constantine and a unique follis of Christopher – assuming that it is genuine – shows that ceremonial coins were occasionally struck in copper as well as in gold and silver. The imperial 'portraits' for the most part lack all individuality, though the heavily bearded faces of Romanus I, Nicephorus II and John Zimisce were presumably intended as likenesses.

The transition from the small module follis to the large one under Michael II has been noted already. In addition to the change in size, the new coin broke with tradition in another significant fashion. The A beneath the M, by now meaningless but recalling the old division of the mint into officinae, was replaced by a Θ presumably so that the reverse type, with a large M and a small Θ, should now consist of the initials of Michael II and his son, the latter appropriately small in size.

Three types of copper were issued by Theophilus, but only two were substantive issues. The first of these was of the traditional pattern, with the large flan introduced by Michael II, and continued the use of M and Θ on the reverse. How long it lasted is uncertain, but it probably ended with Theophilus' first triumph in 831, after his successes against the Arabs, since his second substantive issue has 'victory' characteristics. Before this issue began there were struck the extremely rare coins of Theophilus' Class 2, showing the busts of his son Constantine and himself, which must be dated 830 or 831.

The new follis of the 830s [810] has on the obverse the half-length figure of Theophilus, wearing a loros and a helmet with a fan-shaped crest – it is generally presumed to be that described in the written sources as a tufa – and holding a labarum and a globus cruciger. The inscription in four lines across the field does not content itself, like the inscription by now customary on the miliaresion, with giving the name and titles of the emperor in the nominative case: it is in the dative and is formally accompanied by the traditional acclamation ‘thou conquerest’ used in imperial processions and triumphs: ΘΕΟΦΙΛΕ ΑΥΓΟVΣΤΕ SV ΝΙCΑΣ, i.e. θεόφιλε αὐγούστε, σύ νικᾷς. It is this inscription and the presence of the labarum, used here on a coin of the capital for the first time since the fourth century, which justifies our assigning the introduction of the new coin to 831. The normal weight of the coin was about 7 g. A half follis, of the same type but smaller, was also struck [811].

The issue of the new follis was clearly very large, and its introduction was probably accompanied by a general recoinage of the copper, the old M coins being taken out of circulation and replaced by the new ones. There are inevitably a number of minor varieties – Wroth called attention to varying patterns of pellets on the front of the tufa and the occasional absence of streamers on the labarum – and a careful study brings others to light: the design of the end of the loros hanging over the emperor’s arm, the general proportions of the figure, the presence or absence of an abbreviation after bASIL on the obverse, and varieties in the letter forms on the reverse. These variations were studied by Metcalf with a view to mint differentiation, and broken down stylistically into seven groups with provisional mint attributions. One large group (his Group Z and part of S) is of such rough work, with coarse design [856, 857] and lettering and great flan irregularity, that it cannot be assigned to the capital, but I am not convinced that the other variations represent anything other than the work of different die-sinkers, or in some cases that of the same die-sinker working at different times.

The copper coinage of Michael III in the East is puzzling, for there is nothing that one can assign to the twenty-four years of his sole rule between January 842 and May 866. Either his father’s coinage was on so huge a scale that the Empire was left with sufficient for its needs, or, as seems more likely, the new coinage of Theophilus went on being issued without any change during most of the reign of Michael. The latter’s coinage, when it did come, consisted of the unusual folles [812] having the busts of himself and Basil I, and their titles in Latin, the significance of which has been commented upon already.

Basil I’s folles form five classes, but their order of issue is uncertain. No hoards have been described, though coins of all are common save Class 1, with the busts of Basil and Constantine [813]. This may not be Constantinopolitan at all, since its rough fabric seems out of keeping with that of the other folles of the reign. But it may equally have been due to the steps taken to cope with a long overdue issue of coin in the winter of 867/8, and in default of positive evidence to the contrary it seems best to leave it to the capital. Class 2 shows the seated figures of Basil and Constantine [814]. Both classes have the traditional spelling ROMAION, instead of the ROMEON which replaced them on the later coins of the reign

and was continued under Leo VI. Classes 3 and 4 show a large half-figure of Basil between the smaller figures of Leo on the left and Constantine on the right, each being identified by his name in the inscription being placed above his head. They differ between themselves in the details of the loros and in the fact that Class 3 [815] does not show Basil's left hand, while on Class 4 [816] this is raised in front of his body. Finally, after Constantine's death (in 879), coins of Class 5 show the figure of Basil alone, seated on a lyre-backed throne [817].

Leo VI's folles are of three types, one with his seated figure [818], another with his facing bust [820], and a third with the seated figures of himself and Alexander [819]. Their order of striking is unknown and their features hard to explain, since there are no corresponding gold or silver coins of Leo that recognize the existence of Alexander and there are no folles showing Leo associated with his son Constantine. The possibility of the second class having been struck during the last years of the reign of Basil is one that cannot be excluded, and one must await relevant hoard evidence to decide the matter. No Constantinopolitan folles of Alexander are known at all.

The coins of Constantine VII's reign, whose order of issue is determined by overstriking, form five main classes, showing Constantine either alone [822, 825] or associated with his mother Zoe [821] or his son Romanus II [826], or else Romanus I alone [824]. The most interesting are the last, for they show a bearded bust evidently intended as a portrait and closely resembling that found on the emperor's seals. A coin of Romanus' son Christopher [823], presumably struck to celebrate his coronation in 931, is known only in a single specimen, formerly in a private collection in Austria. It has been suggested that it is a modern counterfeit, produced by recutting a coin of Leo VI of the same type, but I believe it to be authentic.

An alleged follis of Theophano, having as types a bust of the Virgin *orans* and one of the empress, was published by de Saulcy, from a specimen in the Lagoy collection, and reproduced by Sabatier (Pl. XLVII. 9). It is usually dismissed as a forgery, but has recently been defended on the ground that there are seals of Theophano essentially the same in type. It is possible, however, that the Lagoy specimen, whose present whereabouts is unknown, was itself a seal and not a coin,

No folles are known of Romanus II. Two classes with slightly differing busts were issued by Nicephorus II, one of them showing him holding a globus surmounted by a trefoil ornament [827] instead of the customary cross. This symbol occurs on a few other coins and seals of the tenth and eleventh centuries, but its significance is unknown.

## Fractional denominations (Pl. 48)

A feature of the coinage of this period, as has been noted already, is its virtual limitation to a single denomination in each metal. The only fractional gold coins that have survived end with the reign of Basil I, and are of such rarity – most of them are unique – that we need have no hesitation in regarding them as ceremonial issues. No fractional silver is known at all.

Fractional copper is limited to the reigns of Theophilus, Basil I and Leo VI. The half folles of Theophilus [811], which have been alluded to already, were clearly intended for normal circulation and have turned up in excavations in the ordinary way. Probably, when the new coinage was introduced, it was thought that the heavy follis would make a smaller denomination necessary, and when this was found to serve little useful purpose it was simply discontinued. The later fractional coins, on the other hand, are extremely rare, but the crude style and workmanship of most of them raises the question of where and why they were minted.

These exceptional issues, in gold and copper, were as follows.

1. Tremissis of Theophilus [858], corresponding to Class I of the solidus.
2. Tremissis of Theophilus and Michael III [859], corresponding to Class II of the solidus.
3. Semissis of Michael III, corresponding to Class III of the solidus.
4. Tremissis of Basil I, Constantine and Eudocia [860], corresponding to Class III of the solidus.
5. Semissis of Basil I, Leo and Alexander [861]. No solidus counterpart, and of rough style and fabric.
6. Corresponding tremissis, likewise of poor style and fabric [862].
7. Half folles of the same emperors [863]. No follis counterpart, and resembling the semissis and tremissis in style.
8. Half folles of Leo VI and Alexander [864], corresponding to Class 2 of their folles. Poor fabric.

The first four of these coins are unquestionably Constantinopolitan in style, but the later ones have usually been regarded, at least in part, as provincial. Their unlikeness to ordinary Constantinopolitan issues is evident, but it is difficult to imagine provincial mints striking fractional gold and fractional folles with no corresponding units and no Constantinopolitan prototypes. The alternative is to regard their poor fabric and style as a consequence of their being special issues produced in haste by incompetent workmen, rather like the ill-struck large silver medallions of Justin I or II in the sixth century (p. 57). Such an interpretation is strengthened by the fact that the two 'busts' on the coins of Leo VI and Alexander turn out on examination to be only the upper parts of the seated figures of the normal folles of Class 2. The coins were in fact struck by follis dies on flans much smaller than usual and were evidently intended to represent a different denomination.

## Italy and Sicily (Pls 47, 48)

Coinage in the western provinces of the Empire was practically limited to Sicily, for the traditional mints of Rome and Ravenna had long since passed out of imperial control. The only mainland issues consist of crudely designed solidi of somewhat base gold which were

struck in the name of Theophilus [854], or in those of Theophilus, Michael and Constantine [855]. The first series has as reverse type the patriarchal cross on steps of his Constantinopolitan issues; the second is anomalous in having the half-figure of Constantine only, instead of the busts of Michael and Constantine, despite the reference to both in the inscriptions. These coins are of the same general style and appearance as the Italian solidi of Nicephorus which have been doubtfully ascribed to the mint of Naples [731].

Sicilian coinage, on the other hand, was minted in considerable quantity in the 820s and 830s. The gold consisted mainly of light-weight solidi (c. 3.9 g) and tremisses, with semisses struck only rarely, and there is no silver. The copper consists entirely of folles, much lighter than their eastern counterparts, and with M as the reverse type instead of the four-line inscription of the reformed follis of Theophilus. There are no mint-marks, but the coins are mainly found in Sicily itself and are quite distinctive in style and fabric. The mint is commonly assumed to be Syracuse, but some puzzling features of the coinage might be explained if more than one mint existed; future research may show this to have been the case. A notable feature is the gradual reduction in the module of the gold which began under Michael II and was carried further under Theophilus, so that the later issues are almost as thick and globular as those of Carthage had become in the seventh century. Another peculiarity is the tendency of the letter F in Theophilus' name (ΘΕΟΦΙΛΟΣ) to have the form of a square C. The gold is at first of good quality but was badly debased under Michael III and Basil, so that the final issues are little better than plated copper.

A unique solidus is known of Michael II's sole reign [828], so that fractional gold and folles may yet come to light. The gold coins on which he is associated with Theophilus are common, but very variable in their details [829–35]. One or other emperor may wear a chlamys or a loros, the senior emperor may hold either a globus cruciger or a cross potent, Theophilus may be styled *basileus* or *despotes* or have no title at all. Although on the basis of these the coins can be formally grouped into 'classes', it is doubtful if such differences mark any real separation of issues, more especially as substantial variations in module can occur within a single 'class'. As for the copper coins [849], these break with recent Sicilian tradition in adopting the large M and small θ of Michael's Constantinopolitan folles, though without the XXX and NNN. They vary considerably in weight and diameter, but never approach the size of the large-module folles of Michael's later years in the East.

Theophilus' gold coinage is likewise complicated. It forms three main 'classes', two showing Theophilus alone – Class I [836–9] has an initial star before the obverse inscription and gives the emperor the title of *basileus*, Class III [842–5] is without star or title – and one, Class II [840–1], showing Theophilus with Michael and Constantine on the solidi, with Constantine alone, presumably for reasons of space, on the semisses and tremisses. Class I has features that link it with the coins of Michael II's reign and date it to 829/30, while Class II is very rare and was probably struck only in 831. Class III, which is common, is the major coinage of the reign. Many of the coins are globular in appearance, with the solidi no larger in diameter than the tremisses, and a number, of crude style and with badly blundered



inscriptions [843], are probably the products of irregular mints, perhaps even of Arab origin. The commonness of Theophilus' Sicilian gold may be attributed to military needs, for gold would have been required to pay for troops and equipment and the constant warfare with the Arabs would result in much of it being concealed. The folles form two main classes, having as reverse types either an M and Θ between XXX and NNN [852] or the busts of Michael and Constantine [851]. An odd variant of the first class has two Θs replacing the middle X and N, while there is a star above the M and a cross below it [850]. The order of issue of the folles is uncertain, for the coins with an M, which one would expect to be the earlier, show Theophilus with a thin, emaciated face that links them with that on the coins of Michael III's reign.

Under Michael III the end of Sicilian coinage was visibly near. His 'gold' coins are limited to very base semisses [846–7] struck either in his name alone – they have the globus in his right hand surmounted by either a patriarchal cross (Class I) or a plain one (Class II) – or in association with Basil (Class III). His folles have as reverse type an M and Θ, without XXX and NNN. This reversion to the type of Michael II is strange, but the incurved cheeks and thin face of the emperor's bust [853] leave no doubts about the attribution.

Under Basil I the coinage comes to an end, for Syracuse was captured by the Arabs in 878. His only coins are extremely rare semisses [848] and tremisses of base gold showing him associated with his son Constantine.

## Cherson (Pls 48, 49)

The ninth- and tenth-century coinage of Cherson represent one of the oddest by-ways of Byzantine numismatics. The coins are made of a poor quality alloy of copper and lead: an analysis of one by Lucien Sabatier showed 72 per cent copper, 22 per cent lead, and the remainder zinc and tin. They are also cast instead of being struck, and are very rough in design and workmanship. Presumably they were intended as fractions of the follis, made necessary by a lower level of prices in the Crimea than elsewhere, and had to be manufactured as cheaply as possible. They vary from about 10 mm to 25 mm in diameter, and from about 2 g to 7 g in weight, though only the very large ones of Romanus I appear to represent a higher denomination. The series began in the mid-ninth century with small coins [865] about 1 cm in diameter having on one face a Π and on the other a X, for Πόλις and Χερσῶνος respectively. In 866/7 the series became imperial, with the coins [866] having MB (for Michael III and Basil) on one side and ΠX on the other, and retained their official character until the series came to an end in the reign of Basil II, when Cherson was captured by the Russian prince Vladimir (989).

The earlier coins tend to have on one face the initial of the emperor, or those of more than one emperor if there are colleagues: a large B [867, 870], sometimes becoming a monogram of B and Δ [871], for Basil I alone, a large B and a small KΘ or BA and KΘT for Basil I and

Constantine [868, 869], ΛЄ for Leo VI alone [872, 873], ΛΑ for Leo and Alexander [874, 875], Α for Alexander [876]. The usual reverse type at this period is a cross or cross crosslet on steps. One of Leo VI's issues has a bust on one side [873], and this type had a brief period of favour: there are coins of Constantine VII and of Romanus I with a bust on one side and ΚΩ (vertically) or a vertical monogram of ΡΩΜ [878, 879] on the other, and ones of Constantine VII and Zoe [877] and of Romanus I and Christopher [880] with busts on both sides. The details of the busts are usually impossible to make out and the execution is extremely careless: the bust of Christopher, which is identified by ΧΡ, is simply copied from that of Zoe and retains the crown with three pyramids characteristic of that of an empress. There are also larger coins (23 mm) of Romanus I having a monogrammatic ΡΩ on one side and either a cross on steps [881] or Δ (for δεσπότης) [882] on the other.

With Constantine VII and Romanus II more complicated monograms came into fashion, the attempt being gradually made to include all the letters of the emperor's name instead of only a few of them, as had been customary in earlier centuries. For Constantine VII and Romanus II the monograms are still traditional in form, with the letters ΚΩΝCT and ΡΩΜΑ [886], and under Romanus II there is only a badly designed monogram of ΡΩΜΑnoC, accompanied by a Β with an Α in the lower loop (for ΒAsileus) [887], but for Nicephorus II, John I and Basil II there are highly complicated monograms of ΝΙΚΗ ΦΟΡΟC [888], ΙΟΑΝΝΟC [889], and ΒΑΣΙΛΙΟC [890], accompanied by those of ΔЄCΠTC in the first case and ΔЄCΠOTOV in the last two respectively. These changing fashions in coin design are very helpful in dating the coins, since some features could apply to several emperors.

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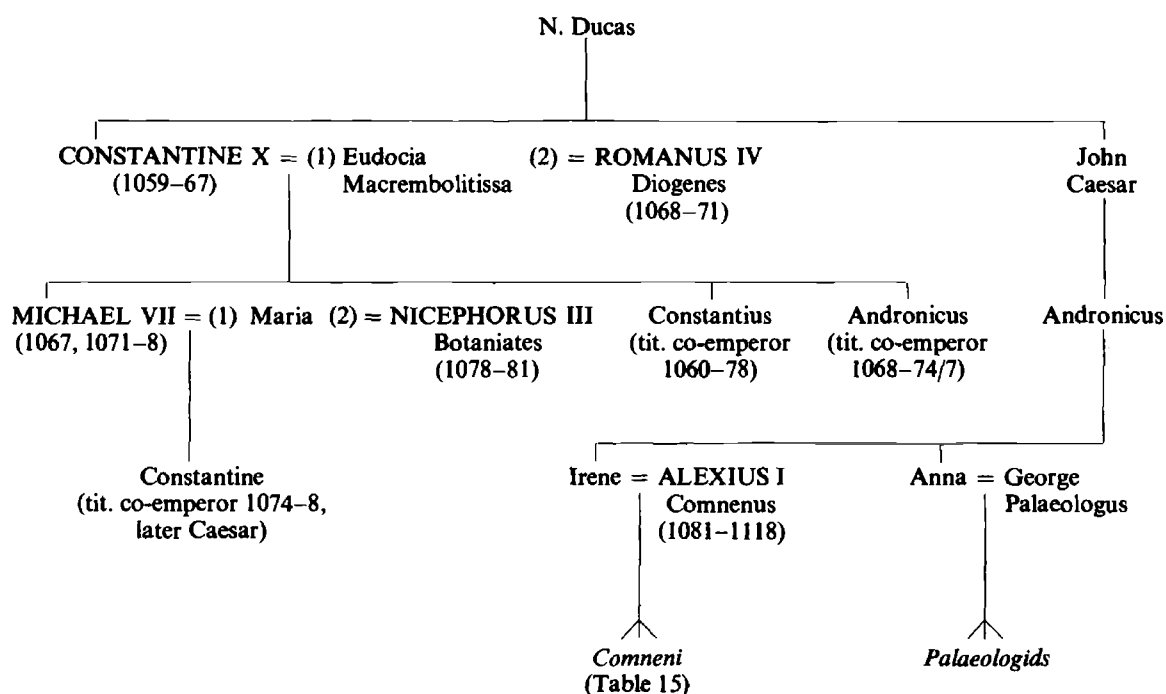
# THE LATER MACEDONIANS AND THEIR SUCCESSORS, 969–1081

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## General features

The Macedonian dynasty ended formally with the death of Theodora in 1056, but the Macedonian period can be conveniently extended to cover the interval between that event and the accession of Alexius I Comnenus (1081). During the three decades prior to 1056 the Macedonian link had indeed been only tenuous, since the actual rulers were a succession of short-lived emperors whom Constantine VIII's daughters, Zoe and Theodora, either nominated or had forced upon them (Table 10 on p. 174). A number of the emperors who ruled after 1056 were members of the great Ducas family or related to it by marriage, as can be seen from Table 11, though this never actually succeeded in forming a dynasty. The new position attained in the mid-eleventh century by the landed aristocracy is reflected in the first appearance of family names on the coins, a use which continued to the end of the Empire. The practice started with Constantine IX Monomachus and is thenceforward almost uninterrupted: Isaac I Comnenus, Constantine X Ducas, Romanus IV Diogenes, Michael VII Ducas, Nicephorus III Botaniates and the pretender Nicephorus Melissenus. The first two of these rulers used their family names only on the gold; later ones used them on the silver also, though rarely on all issues or denominations. The only gap in the series is Michael VI, of the obscure Bringas family, who normally appears in the written sources with his nickname Stratioticus.

Table 11 Imperial connections of the Ducas family



The list of rulers between 969 and 1081 is as follows:

John I Zimisce	969-76	(nominally with Basil II and Constantine VIII)
Basil II Bulgaroctonos	976-1025	(nominally from 963)
Constantine VIII	1025-8	(nominally from 963)
Romanus III Argyrus	1028-34	(husband of Constantine VIII's daughter Zoe)
Michael IV the Paphlagonian	1034-41	(husband of Zoe)
{ Zoe	1041-2	
{ Michael V Calaphates	1041-2	(nephew of Michael IV)
Zoe and Theodora	1042	
Constantine IX Monomachus	1042-55	(husband of Zoe)
Theodora	1055-6	
Michael VI Stratioticus	1056-7	
Isaac I Comnenus	1057-9	
Constantine X Ducas	1059-67	
Michael VII	1067	(with his brothers Constantius and Andronicus and with his mother Eudocia Macrembolitissa as regent)

Romanus IV Diogenes	1068–71	(nominally as regent for his stepsons Michael VII, Constantius and Andronicus)
Michael VII	1071–8	(nominally from 1067, with his brothers Constantius and Andronicus)
Nicephorus III Botaniates	1078–81	
Nicephorus Bryennius, pretender	1077–8	
Nicephorus Basilacius, pretender	1078	
Nicephorus Melissenus, pretender	1080–1	

Coins are known of all but one of the rulers and pretenders in the list, though there were some periods when no coins were struck in one or other metal and for nearly a hundred years (969–1059) all folles were anonymous, not bearing the name of individual emperors and not changing in type at each imperial accession. The emperor for whom there are no coins is Michael V Calaphates, since Zoe was technically sovereign during his 'reign'; the coins that have been ascribed to him belong to either Michael IV or Michael VI. For Zoe herself only patterns are known, and no actual coins. The list of emperors does not in any case exhaust the names of those who appear on the coins. The empress Eudocia Macrembolitissa appears, for no good reason, on folles of Constantine X, and on coins of Romanus IV and Michael VII as regent for the latter, while the empress Maria appears on coins of Michael VII and Nicephorus III as wife in succession to those two sovereigns. This repeated appearance of Eudocia and Maria on even the gold coinage was a belated tribute to the prominent political role played by Zoe and Theodora between 1028 and 1056, but the phenomenon proved to be of a temporary character and left scarcely a trace in the Comnenian period.

The coinage of the entire Macedonian period (867–1056) can be divided, as has been seen already, into two distinct phases, that of the century 867–969 being essentially a continuation of the coinage of the Amorians. It is iconographically more interesting, with a profusion of ceremonial issues and the use of a seated figure or a bust of Christ as the regular obverse type on the gold, but otherwise the pattern of the coinage underwent little change between the accession of Basil I and the death of Nicephorus Phocas. The century 969–1081, on the other hand, saw a radical transformation in the external aspect of Byzantine coinage and ultimately a breakdown of the whole monetary system. Nicephorus II had already introduced the tetarteron, a new gold nomisma slightly lighter than the traditional coin, from which it was not at first differentiated in its outward appearance. John Zimisce replaced the customary follis, purely imperial in character, with the Anonymous Follis bearing only religious types and inscriptions. Under Basil II the nomisma split into two distinct denominations, a histamenon of large flan and a tetarteron of small flan, with types sufficiently different in appearance for the coins not to be confused in the future. Basil also greatly increased the weight of the follis, whose relationship to the solidus approached, at least for a time, that which had obtained in the sixth century.

These changes were only a prelude to what was to come. In the 1030s, under Michael IV, the imperial nomisma was debased; what had occasionally been done in the provinces in earlier centuries was now for the first time practised in the capital itself. Michael's successors continued the debasement, at first on a small scale but in the 1070s, in the crisis following Manzikert, very extensively indeed. The 'gold' coins of Nicephorus III were in fact of electrum, 8 carats fine or less, and so pale in colour that they have sometimes been mistaken for silver by modern collectors. They were no longer struck flat, but concave, this being apparently a device intended to indicate that they were of impure metal, just as modern states have sometimes issued nickel coins with a hole in the centre to prevent their being mistaken for silver. The debasement of the gold naturally threw the rest of the monetary system into confusion. The old uniformity of the miliaresion disappeared, and fractions began to be struck with a considerable diversity of type. The follis declined greatly in weight, though the practice of incessant overstriking makes it almost impossible to discern the exact pattern. The way was prepared for the final collapse of the old monetary system in the first decade of the reign of Alexius I and the creation of a new one as a result of the reforms of 1092.

These changes have to be seen in the context of the great reversal of Byzantine fortunes that took place in the eleventh century. The reign of Constantine VII had represented one of the high points in the cultural history of the Empire, and those of Nicephorus II, John I and Basil II had been ones of great political achievement. During the tenth century two Bulgarian khans had assumed the title of *basileus Romaion* and attempted to capture Constantinople. On the first occasion the ambitions of the tsar Simeon were foiled by Romanus I; on the second, after two decades of exceptionally savage warfare, Basil II, 'the Bulgar-Slayer', totally destroyed the Bulgarian kingdom and extended the Byzantine frontier to the Danube. On the eastern borders of the Empire Nicephorus II and John Zimisces, following in the wake of Romanus I's great general John Kurkuas, recovered Antioch and Syria, which had been lost to the Arabs in the seventh century, and established Byzantine control of the upper Euphrates and in eastern Asia Minor and Armenia beyond Lake Van. The reoccupation of Crete and Cyprus was a more than adequate compensation for the loss of the remaining Byzantine possessions in Sicily to the Arabs and of Cherson to the Russians. By the mid-eleventh century, however, the tide of victory had begun to ebb, partly because the immense military effort had overstrained the Empire's resources, partly because of political difficulties created by the emergence of a landed aristocracy and its struggle with the bureaucracy of the capital, partly because of the appearance of new enemies on the scene. In 1071, at the battle of Manzikert, the Seljuq Turks inflicted on the Byzantines the most disastrous single defeat in their entire history, and in the following decade, taking advantage of the prolonged struggle for power in Constantinople, they were able to occupy most of Asia Minor. In the West, the Normans proved a more dangerous enemy than the disunited Lombard states had ever been. The last Byzantine stronghold in Italy was lost in 1071 and Robert Guiscard was left free to carry the war into the Balkans, where he hoped that the capture of Durazzo (1081) would open to him the gateway to the capital and the acquisition of the imperial crown.

One might expect the territorial expansion of the late tenth century to have been accompanied by a multiplication of imperial mints, but it is not certain how far this was the case. The main mint was undoubtedly Constantinople. The coinage of Cherson came to an end in Basil II's reign, presumably in 989, when the city was captured by Vladimir of Kiev. A good case has been made out for assigning to Thessalonica a rare type of hyperpyron issued by Michael IV. Towards the end of the period some minting certainly took place in the provinces. The coins of the pretenders Nicephorus Basilacius, Nicephorus Bryennius and Nicephorus Melissenus were necessarily struck outside the capital, and Hendy has argued that the folles bearing the names or initials of Constantine X, Romanus IV, Michael VII and Nicephorus III should be assigned to Thessalonica, though the case does not seem to me a compelling one. Beyond this, in the absence of mint-marks, it is difficult to go. Metcalf would assign many of the early Anonymous Folles to provincial mints, partly on stylistic grounds and partly because of irregularities in their distribution pattern, but it is impossible to reach any certain conclusion on the evidence at present available. Whether a large group of imitations of Anonymous Class B [985] are eleventh-century counterfeits, or the products of some provincial mint, is impossible to say.

The main changes in the external appearance of the gold coins came about through the creation of the tetarteron; the increase in the flan of the histamenon which made it a broad, thin coin nearly twice as large as the tenth-century nomisma; the introduction of the concave fabric in the 1040s; and the debasement that started in the 1030s and reached its climax in the 1080s. The significance of these will be discussed in due course. On the silver, representations of Christ or the Virgin replaced the cross potent on steps that had for so long been the distinctive mark of the miliaresion, and fractional silver coins with religious types were introduced. The copper saw the replacement of imperial representations by ones of Christ or the Virgin. The volume of the coinage issued was enormous, especially in gold and copper, and miliaresia of Basil II are the commonest silver coins in the whole Byzantine series. But supplies of this metal began to dry up towards the very end of the tenth century, so that miliaresia of his successors are rare. The copper coinage is anomalous, since in contrast to the heavy folles of the sixth century the Anonymous Folles have no elaborate pattern of fractional denominations beneath them, such as one would expect. The lack of an effective small change at this period presumably implies a high level of prices and limited economic activity.

The eleventh century saw a marked rise in the artistic level of the silver and gold coinage, many of the types used being of great beauty. The element of portraiture in the imperial busts is often strong, providing a welcome change from the linear treatment and iconographic anonymity of the Isaurian and Amorian periods. The imperial costume is usually very carefully delineated, especially on the histamena. The loros is more frequently worn than the chlamys, usually in the modified form with small, square panelling introduced in the preceding period (see p. 176). On later coins the loros often has a large and almost rectangular panel in front, which Hendy has christened a 'loros waist', with a special

decoration of its own. In the twelfth century this was to be frequently used for officina identification (see p. 222). The corresponding panel on the *loros* worn by an empress, which some scholars have wrongly identified with the *thorakion*, an element in the imperial costume referred to in the written sources, is often kite-shaped [e.g. 922, 924]. On some eleventh-century coins, after a lapse of many centuries, the emperor is again shown in military costume [e.g. 918, 956], though he now wears scale instead of plate armour and holds a sword instead of the lance customary on military representations of the sixth and seventh centuries.

The imperial inscriptions usually take the form of the emperor's name followed by some abbreviated version of *basileus*, *despotes* or (rarely) *autokrator*, with occasionally some epithet like *porphyrogenitus* (Basil II, Theodora) or *orthodoxos* on *miliarsia*. The use of family names has been noted already. Invocations such as 'O Lord, aid ...' or 'O Mother of God, aid ...' are common (ΚΕΡΟΗΘ or ΚΕΡΟ for Κύριε βοήθει, ΘΚΕΡΟ for Θεοτόκε βοήθει). Exceptional *miliarsia* of Basil II [953] and Romanus III [955] have lengthy affirmations of confidence in the Virgin: 'O Mother of God, full of glory, he who trusts in thee will never be disappointed' and 'Whoso hath set his hope in thee, Virgin all-glorious, prospereth in all his works', the latter being an hexameter verse reading from one side of the coin to the other. The language of the inscriptions had become by the tenth century almost entirely Greek, and even the use of Latin letters is on the point of disappearing. The name of Nicephorus II Phocas, on his second type of *nomisma*, is spelt entirely in Greek characters: ΝΙΚΗ + ΟΡ instead of the mixed ΝΙΧΦΟΡ of his first type, the phi having the form of a cross. By the second half of the eleventh century the letter C has ceased to stand for a kappa, as it had done earlier, and always represents a sigma, so that the traditional spelling CON, still used under Constantine IX, has to become ΚΩΝ under Constantine X, while C in its turn stands for Σταυρὲ ('May the Cross ...': see p. 209). Certain letter forms are very distinctive: B is normally written R, so that *basileus* becomes ΡΑCΙΑΕΨC; A is often Λ; M is usually rounded. The quality of the lettering leaves a great deal to be desired. On much of the gold coinage the letters were so reduced in size and formless that they cannot be accurately reproduced in print at all, while on the copper they are large and coarsely rendered, with no attention to detail.

One result of the debasement of the gold coinage was a sudden proliferation of novel coin names, since it was now often necessary to distinguish between *nomismata* of different values in which payments might be made. Descriptive terms had occasionally been used in the tenth century (see p. 176), but they now become much more numerous. Only a few Greek ones are known from eastern documents, which are relatively rare in this period. Our sources are mainly south Italian charters, which may be in either Latin or Greek, and the *synodikon* of the Georgian monastery of Iviron on Mount Athos, which was compiled between 1074 and 1116 and gives many Georgian names for which one must assume that Greek equivalents existed. The terms sometimes refer to a conspicuous feature in the design – the large stars in the field on one type of *histamenon* of Constantine IX [915] giving it the name *stellatus*, three



or six standing figures [922, 923–4] giving *triakep'hali* ('three-headers') or *ek'ust'avi* ('six-headers') – sometimes to the names of the emperors concerned – (*h*)*remanati* for coins of Romanus III or IV, *michaelati* or *doukamikhailati* for coins of Michael VII Ducas – sometimes to a combination of the two: *stavrobotaniati* for ones showing Nicephorus III Botaniates holding a cross-sceptre [927]. The most important novelties were in Italy the term *scifatus* and in the East *trachy* (τραχύ; pl. *trachea*) and *hyperpyron* (ὑπέρπυρον). The first of these, which is Arabic in origin and referred to the conspicuous triple border of the last type of Basil II's histamenon and its successors, was wrongly supposed by several generations of modern numismatists to have designated concave coins (see p. 198). The second, a Greek word which basically meant 'rough' but, by extension, 'not flat', was in fact what concave coins were termed in Greek. The third, meaning 'super-refined', appears in this period as early as 1017, and was to be that regularly used for the nomisma after the return to coins of good quality in 1092 (see p. 217).

Another feature of the period, which can at least in part be construed as a tribute to the artistic quality of Byzantine coins, is the way in which these influenced coin designs elsewhere. There is naturally nothing comparable to the massive pseudo-imperial coinages of the sixth and seventh centuries, but there was intensive copying of Byzantine coin types on Danish silver pennies of the middle decades of the eleventh century and occasional copying of older types elsewhere in western Europe. The first can probably be attributed to the dispersal of a treasure of almost legendary dimensions brought home in the 1040s by Harald Hardrada, for the dates of the coins that served as models coincide almost exactly with those of his years in Byzantine service. The others – the copying of the reverse type of a solidus of Justin II in England under Edward the Confessor, the copying of the obverse and reverse of a solidus of Theophilus by some Rhineland mint near the close of the tenth century – can only be attributed to chance. Nearer home there was the striking at Salerno of folles, partly original in design but partly Byzantine in inspiration, to make good local shortages resulting from the occupation of southern Italy by the Normans. Byzantine miliaresia also influenced the earliest silver coinages of Russia, Armenia and Georgia. The occupation of Asia Minor by the Seljuqs resulted in some local countermarking of folles, and even in a few coin designs for which Byzantine prototypes can be found.

## Gold coinage (Pls 50, 51)

The gold coins of the period 969–1081 were with a single exception struck at Constantinople, are all formally of the same denomination, and are essentially similar in type, having on the obverse a representation of Christ or – rarely – of the Virgin and on the reverse one of the emperor. But within these limits there are great variations. The emperors are differentiated in personal appearance from Constantine VIII onwards, and when several coin types were issued in a single reign the imperial costume can vary substantially. Christ is represented in

various ways – his bust only, or half-length, or seated, or standing – and his gestures or the form of the throne will differ from one type to another. Even within the parameters of a single design, such as the Pantocrator type (see p. 36) which was used without a break from 945 to 1028, great variations were possible, as can be seen from the coins on Pls 50 and 51. Christ's beard is initially straight and subsequently curly; the position of his left hand is moved from the fore edge of the Gospel Book towards the centre of the cover; this in turn is decorated with one or more pellets separated by Christ's forefinger; the lines become more fluid, accentuating the folds of the cloak and emphasizing the horizontal elements in the design. Many of the coins are amongst the most interesting and beautiful in the entire Byzantine series.

More important, however, were the changes in the weight, fineness and fabric of the coins. The single denomination was in fact subdivided, light-weight nomismata being struck from the reign of Nicephorus II onwards, so that there were two coin series, heavy ones known as *histamena* and light ones known as *tetartera*, instead of one. Both were debased from the 1030s onwards, and the heavier coins began to be made concave in the 1040s.

The difference between the two forms of the nomisma can be seen by comparing Pls 51 and 52 with Pl. 53, the *histamena* on Pls 51–2 being broad, thin coins about 26/28 mm in diameter and the *tetartera* being smaller and thicker ones of only 17/19 mm. The *tetartera* are also lighter, weighing c. 4.10 g, or 2 carats less than the full nomisma. This appears to be the explanation of their name, as the Greek for 'quarter' is τέταρτον μέρος ('fourth part') and the main series of *tetartera* weigh a quarter of a (notional) tremissis less than a nomisma. The coins of full weight came to be known as *histamena* (ἱστάμενα) or *stamena*, since they conformed to the traditional standard (ἵστημι, to 'stand up', 'set up'). The light coins were introduced by Nicephorus II, as we know from both the coins themselves and the literary evidence, but at first they were not differentiated in appearance from regular nomismata and varied in weight, some being heavier and others lighter than what later became the regular *tetarteron* standard. It was only some way into the reign of Basil II that the two kinds of nomisma began to be differentiated in type and in module. *Tetartera* of the period 963–1028 seem also to have been struck on a quite limited scale, apart from the last issue of Basil II of which entire hoards have been found, and their role in the circulating medium cannot have been great. In the 1030s their issue was suspended, none being known of either Romanus III or Michael IV, but they were revived under Constantine IX and thenceforward, down to Michael VII, *tetartera* and *histamena* seem to have been issued in approximately equal numbers.

The purpose of this new form of nomisma, which caused much confusion and difficulty to users, is not altogether certain. The eleventh-century historian Scylitzes treated it as a financial expedient of a military emperor in need of money: taxes were collected in terms of full-weight nomismata, government payments were made by tale in light-weight *tetartera*. Modern scholars have suggested that it was a concession to the monetary needs of the provinces recovered from the Arabs, since the *tetarteron* was the same weight as the Muslim dinar, or even that its introduction was a first move towards the general adoption of the dinar

standard, a project subsequently abandoned for reasons that escape us. It is difficult to choose between the various possibilities, and it may well be that Scylitzes' interpretation, despite his prejudice against Nicephorus, is correct. Eleventh-century documents show how vexatious the existence of tetartera could be, and how ambiguities as to which type of nomismata were intended in contracts were sometimes solved by making payments half and half in both.

The problems created by the existence of two different kinds of nomisma were exacerbated in the 1030s by their debasement. Since its creation under Constantine the standard gold coin of the Empire had remained unchanged in fineness, though debased coins had been at times extensively struck in Italy. In the reign of Michael IV (1034–41) this proud, seven-century tradition was broken, and in the course of the next forty years the gold content of the Constantinopolitan nomisma was reduced to a third of its original figure. Although some of Michael's coins are of virtually pure gold, others are only 20 carats fine. Under Constantine IX (1042–55) there was a further reduction to about 18 carats, at which figure the coins remained more or less stable down to 1070. The fall was then resumed. Michael VII's nomismata dropped from 16 carats to 12, and Nicephorus III's to a little over 8. Alexius I subsequently debased the nomisma out of existence, and a fresh start, with a new coin known as a hyperpyron, of the same weight as the traditional nomisma but only 20½ carats fine and unaccompanied by any tetarteron, had to be made in 1092.

The reasons for the debasement, like those for the introduction of the tetarteron, are not clear. There was probably, at least at the start, an element of financial irresponsibility. Michael IV had been a money-changer before he became emperor, and is reported by a contemporary writer to have dabbled in false coining; he must at least have been acquainted with the possibility of gaining illicit profits by manipulating the coinage. Several mid-century rulers had reputations for harshness as tax collectors and for foolish extravagance, while the financial situation of the treasury, in the decades following Manzikert, must have been difficult in the extreme. How far purely administrative or fiscal difficulties were augmented by genuine economic pressures is harder to say. The period was one of inflation over much of western Europe, but apart from the debasement of the coinage our evidence for the existence of economic difficulties at Byzantium is slight. The state had faced greater financial problems in earlier centuries, and its rulers had resisted the temptation to debase the currency. Eleventh-century emperors evidently saw things differently.

The debasement was probably the explanation of the further change in the appearance of the coins that occurred in the 1040s. Under Basil II the module of the histamenon had been increased from *c.* 21 mm to over 25 mm, to make clear its distinction from the tetarteron. In the mid-1040s the distinction was underlined by making Class II of the histamena of Constantine IX concave in fabric, and after a brief return to flat coins in the reigns of Theodora and Michael VI the concave fabric was revived by Isaac I and henceforward is a regular feature of the full histamenon, being even continued after 1092 for the hyperpyra of the Comnenids. Its meaning has been much discussed. One view is that it was initially

intended to strengthen the coins, which had become too easily bendable by reason of their breadth and thinness, and that it was subsequently retained as an indication of debasement, this being the explanation of why under the Comnenids the coins of electrum and billon were also made concave, leaving only ones of pure copper flat. This interpretation, however, fails to explain why the tetartera, which were certainly debased, nonetheless remained flat, and Mme Morisson prefers to regard concavity as a mark of conformity with the traditional nomisma weight. What is at least clear is that the common description of such coins as *scyphate*, on the assumption that the eleventh-century word *scyphatus* was derived from the Greek σκύφος ('cup') and referred to them, is incorrect. Histamena are described in south Italy as *scifati* as early as 1024, before the concave fabric had been introduced, and the true etymology of the word is *shuffi* or *shiffi*, from Arabic *shafah* meaning an edge or rim, referring to the conspicuous border on Class V of Basil II's histamena and on those of his successors.

The gold coins of the period are shown on Pls 50–3. They are in general common, are well designed apart from their tiny, ill-formed lettering, and are well struck. Those of John Zimisce belong essentially with those of the early Macedonian period, while the long reign of Basil II marks the transition from these to the new coinage of the last Macedonians and their successors.

The designs of the coins of John Zimisce [792] are all essentially variants of the same theme, with a bust of Christ on the obverse and those of the emperor and the Virgin on the reverse. They carry on from those of Nicephorus II [791], but the Virgin now blesses the emperor instead of holding jointly with him a patriarchal cross. The emperor sometimes holds a globus surmounted by a trefoil, with or without a large cross in the field, sometimes a plain cross or a patriarchal one, the latter being the main type of the reign and the only common one. Tetartera differ from full nomismata in weight only, not in type.

The coinage of Basil II and Constantine VIII is much more remarkable, for it saw the separation of tetartera and histamena as distinct coinages and the use on Classes II and III of the histamena of privy marks analogous to those on the miliaresia and apparently serving as dates. These symbols are usually accommodated in the cross-arms of Christ's nimbus, which had been previously very small, containing no more than one or two pellets, but which are now enlarged to take a variety of different symbols or are otherwise modified by the use of double lines for the cross-arms or for the circle of the nimbus itself. The sequence of classes can be deduced from the increasing module of the coins and the introduction of serifs to the cross-arms in Christ's nimbus. The duration of the issue of each is inferred from their relative rarity and, for Classes II and III, from the number of privy marks that occur. The classes and suggested dates of the histamena of Basil II are as follows.

I. 977. Bust of Christ./Two busts with patriarchal cross, Basil wearing modified (i.e. square-patterned) loros. [891]

II. 977–89. Bust of Christ, with ornaments in cross-arms of nimbus./Same reverse, but Basil wears normal loros, and there are sometimes ornaments on shaft of cross.

Twelve varieties of obverse privy marks recorded (one pellet, two pellets, bar, wedge, pellet in circle, etc.). [892–7]

*Silver pattern.* 989. Standing figure of Basil./Standing figure of Virgin. Only a silver pattern is known, probably intended to complement the miliaresion of 989. [898]

III. 989–1001. As Class II, with eleven varieties of privy mark./Same as Class II, but Basil wears modified loros and the arms of the patriarchal cross have terminal pellets. [899–902]

IV. 1001–5. As last, but the only privy mark is a pattern of seven pellets./As last, but crown suspended over Basil's head, probably celebrating his triumph in 1001 after two years' fighting in Asia Minor. [903]

V. 1005? Variety of last, with differing patriarchal cross. (Die-sinker's variety, not a proper class.) [904]

VI. 1005–25. Usual bust of Christ, but crescents in upper quarters./As before, but emp. holds plain cross. On both sides, triple border of dots. This class, which is very common and bears no dating marks, is the final issue of the reign. [905]

Five varieties are known of the tetartera of Basil II, all but the last being rare and no precise dating being possible. They are illustrated on Pl. 53 [930–4], and no detailed characterization seems necessary.

The histamena of later emperors need not be described in detail. Those of Constantine VIII [906], which show his characteristic portrait, exist in two varieties, with or without a pellet on the staff of the labarum. The object in the emperor's left hand is the hilt of his sword. Those of Romanus III [907] exhibit much variety in detail (Virgin sometimes nimbate and sometimes not, variable number of pellets on the loros end, etc.). The Constantinopolitan histamena of Michael IV [908] are chiefly interesting because of their portraiture and the varying forms of the labarum, which may possibly indicate differing dates. The attribution of his Thessalonican issue [909], with its novel type showing the archangel Michael handing a labarum to the emperor, has been much discussed. The fact that it is imitated on Danish pennies of the 1040s shows that it cannot belong to Michael VI, as Wroth believed; and Hendy has made out a convincing case against attributing it to Michael V, to whom I formerly gave it, and in favour of attributing it to Michael IV and Thessalonica, which was the emperor's headquarters during the Bulgarian campaign in the last year of his life.

There is in the Archaeological Museum at Istanbul a unique copper pattern [910] of a histamenon of Zoe having on its obverse the icon of Christ Antiphonetes which we know from Psellus was greatly revered by the empress. Histamena of the six weeks' joint reign of Zoe and Theodora (20 April – 11 June 1042) were unknown prior to 1953, when a few [911] came to light in a Turkish hoard dating from the early years of Constantine IX. This emperor's thirteen years saw the issue of four types [912–15], Class I having variants in the form of the globus cruciger and Class II in that of the labarum. Classes II and III are concave, as are most coins of Class IV, but some of the latter are flat, as are the coins of

Theodora [916: there are varieties in labarum form] and Michael VI [917: varieties are round or square dots in the ornaments in the cross-arms of Christ's nimbus, the presence or absence of fringe to the emperor's chlamys]. The histamena of Isaac I [918, 919], showing the emperor holding a sword, were criticized by contemporaries as seeming to imply that it was from this, and not from God's grace, that his authority derived, though the drawn sword of Class II was probably only intended as a threatening gesture directed against his enemies. Constantine X issued two classes of histamena [920, 921], Class I having two varieties according to whether there is or is not a pellet on the labarum staff. Three coinages [922, 923, 924] mark the reigns of Eudocia Macrembolitissa with her two elder sons Michael VII and Constantius (1067) and with her three sons and her second husband Romanus IV (1068–71); on the latter the children are given the place of honour on the obverse of the coins, thus proclaiming that, despite Romanus being the effective ruler, the legal precedence lay with Eudocia's children by Constantine X. The histamena of Michael VII [925, 926] and those of Nicephorus III [927–9] are chiefly remarkable for the poor quality of their gold.

The tetartera of the period 1025–81 are shown on Pl. 53 [935–49] and require no specific comment. Unlike the histamena there are few varieties within each reign. Several of them have the Virgin instead of Christ as the obverse type, a sign of their slightly lower rank in the hierarchy of denominations. This is also shown by the presence of Maria of Alania, wife of Michael VII, on this emperor's tetartera [946, 947], for she had not appeared on his histamena. Just as there is a copper-pattern histamenon of Zoe, so there is also one for a tetarteron, but on this her bust forms the obverse type and her father's that of the reverse (*DOC* 3, Pl. LVIII.2).

## Silver coinage (Pls 54, 55)

The silver coinage of the period 969–1081 is much more varied than that of the preceding century. Changes were relatively few prior to 1030, though Basil II issued an experimental type with a bust of the Virgin and some of his regular types bear privy marks that probably marked consecutive issues. But between 1030 and 1081, despite the increasing rarity of the coins, there was a proliferation of new types and new denominations. Finally, in the 1070s, some of the coins were seriously debased.

Basil II, when he came into power in association with his brother in 976, struck first a coin [950] with a patriarchal cross-crosslet and no imperial effigies, since there would have been no room for two busts in the customary medallion at the intersection of the cross-arms. Only two specimens of this type are known, and it was immediately replaced by the main type of the reign, having a cross flanked by two busts in the field. The early coins of this class (977–89) are of the same diameter (c. 23 mm) as the miliaresia of John Zimisce. They form

two groups, according to whether they have ΠΙΣΤΟΙ [951] or ΠΙΣΤΥ [952] in the inscription, and have a variety of different ornaments above and below this. Since twelve such varieties have been recorded, it is possible that they indicate dates, and were changed annually. The later coins of this type [954], those struck after 989, are of larger module (*c.* 27 mm) and have the base of the cross decorated with floral ornaments of various kinds (five variants known). The earlier group was minted in very great quantity and is perhaps the commonest Byzantine silver coin on the market today. Imitations of it were struck in south Russia, presumably to make good a drying-up of supplies after the Byzantine loss of Cherson in 989, but the poor metal of the imitations reflects the ‘silver famine’ referred to below.

Basil was also responsible for an innovation as remarkable as Romanus I’s projected portrait *miliaresion*, the striking of an anonymous coin [953] having on the obverse a facing bust of the Virgin holding a medallion of Christ – this was the famous icon known as ἡ Νικοποιός, ‘the Maker of Victory’ – and on the reverse an inscription expressing confidence in her aid. The coin was attributed by nineteenth-century scholars to John I, but a reference in the inscription to ‘the emperors’ in the plural puts it in the reign of Basil II and Constantine VIII. It is reasonable to associate it with the battle of Abydos in 989, when the dramatic death of the rebel Bardas Phocas as the result of a heart attack or a stroke was attributed to the intervention of this miracle-working icon, which Basil himself bore into the fray.

*Miliaresia* of the eleventh century are much rarer than those of the tenth, since Byzantium was affected by the general shortage of silver which obtained over most of the Islamic and Christian worlds at this period. The causes of this silver famine are unknown – one of them may have been the exhaustion of the great Zarafshan mines in central Asia – but it resulted in the widespread abandonment of silver coinage in the Muslim states of the Near East and in a general tendency to debasement in the silver penny in western Europe. The weight and fineness of the *miliaresion* were maintained fairly well down to the middle decades of the century. A frequency table of nearly a hundred well-preserved *miliaresia* of Constantine IX [956] in the Oxarve hoard from Gotland shows these to have weighed 3 g, like the *miliaresion* of the tenth century, and modern analyses show such coins to have been of normal fineness. The details of the subsequent decline are difficult to follow, for the religious types of the coins led to their use as ornaments and most specimens that survive have been pierced or mounted. Fineness was maintained at a very high figure (*c.* 995/1000) down to the reign of Romanus IV (1068–71), when irregularities set in. His two-thirds *miliaresia* of what in *DOC* 3 is termed Class II [967] are still extremely fine, but those of Class I [966] are only about 700/1000, as are the two-thirds *miliaresia* of Michael VII’s Class I [971], which are of the same type. Since Michael’s other coins average 900/1000, it is possible that the debased ones in both reigns were struck in the months after Manzikert, when Romanus was still fighting to recover the throne. Some of Romanus’ later coins are under 900/1000, however, and those of Nicephorus III fall to 700/1000 or even less.

The issue of fractional *miliaresia* began in the middle years of the eleventh century, the

Table 12 Types of silver coins, 1028–81

Emperor	Miliaresion	Two-thirds miliaresion	One-third miliaresion
Romanus III, 1028–34	Virgin Hodegetria standing./Emp. standing. [955]		
Michael IV, 1034–41			
Zoe, 1041–2	Bust of Virgin./Bust of emp. (pattern).		
Constantine IX, 1042–55	Virgin standing <i>orans</i> ./Emp. standing. [956]	Bust of Virgin Blachern./Inscr. [957]	
Theodora, 1055–6		Bust of Virgin Blachern./Inscr. [958]	
Michael VI, 1056–7		Bust of Virgin Blachern./Inscr. [959]	
Isaac I, 1057–9		Bust of Christ./Inscr. [960]	
Constantine X, 1059–67	Inscr./Cross and two busts. [963]	Virgin standing <i>orans</i> ./Inscr. [961–2]	Bust of Virgin <i>orans</i> ./Inscr. [964–5]
Eudocia, 1067–8			
Romanus IV, 1068–71		(I) Bust of Virgin Nikop./Inscr. [966] (II) Bust of Christ./Inscr. [967]	Bust of Virgin <i>orans</i> ./Bust of emp. [968]
Michael VII, 1071–8	(I) Inscr./Cross and two busts. [969] (II) Virgin standing <i>orans</i> ./Emp. standing. [970]	(I, II) Bust of Virgin Nikop./Inscr. [971–2] (III) Inscr./Cross and two busts. [973] (IV) Christ seated./Inscr. [974]	(I) Bust of Virgin <i>orans</i> ./Inscr. (II) Bust of Christ./Inscr. [975]
Nicephorus III, 1078–81	(I) Inscr./Cross and two busts. [976] (II) Virgin standing <i>orans</i> ./Emp. standing. [977]	Bust of Virgin <i>orans</i> ./Emp. standing. [978]	
Nicephorus Melissenus, pretender 1080–1		Bust of Virgin./Inscr. [979]	



two-thirds miliaresion under Constantine IX [957] and the one-third miliaresion under Constantine X [964–5]. Their types, and those of the contemporary miliaresia, are usually different from that of the traditional miliaresion, which had been used with such little variation during the preceding three centuries. The variations in type are set out in Table 12, and the coins are illustrated on Pls 54–5. Three issues – miliaresia of Constantine IX [956] and Classes II of those of Michael VII [970] and Nicephorus III [977] – are concave, but neither of the two earlier of these, in contrast to gold concave coins, is debased.

Although many of the new coins retain an inscription in several lines on one face, the other is normally occupied by a representation of the Virgin or of Christ. On the two-thirds miliaresia of Constantine IX, Theodora and Michael VI [957–9] there is a bust of the Virgin *orans* which is formally described as ἡ Βλαχερνίτισ[σ]α, a representation of the icon in the church of the Virgin at Blachernae which was one of the most venerated palladia of the city. Its use at precisely this date in the mid-eleventh century may have been due to the sexcentenary celebrations of the church, which had been founded and built by the empress Pulcheria in the years around 450. The bust of the Virgin Nikopoios appears on coins of Romanus IV and Michael VII [966, 971–2], a bust of Christ under Isaac I, Romanus IV and Michael VII [960, 967, 975], and a seated Christ under Michael VII [974]. Standing figures of the Virgin appear on the two-thirds miliaresion of Constantine X and the full miliaresia of Romanus III, Constantine IX, Michael VII and Nicephorus III [955, 956, 961–2, 970, 977], one [955] being of the type known as the Hodegetria, the others the Blachernitissa. Three late rulers, Constantine X, Michael VII and Nicephorus III, reverted to the traditional type of Basil II, that of a cross on steps between two busts, but since none of the three had an imperial colleague, the second bust in each case had to be that of the empress [963, 969, 976]. The type was probably revived after so long an interval because of the good reputation of the original issues.

Some coins of the period are strikingly beautiful, notably that having on the obverse the Virgin Hodegetria, with the infant Jesus in her arms, and on the reverse the standing figure of the emperor [955]. These coins, which are anonymous, were formerly attributed to Romanus IV (1068–71), but since they were copied by Danish silver pennies struck in the 1040s they are better attributed to Romanus III (1028–34), who is known to have had an intense devotion to the Virgin. Conversely, the one-third miliaresion here attributed to Romanus IV [968] is given by some scholars to Romanus III. Decisive evidence one way or the other is lacking. Unlike most of the coins from Constantine IX Monomachus onwards it does not give the emperor his family name, but the fourfold repetition of Δ in the border (perhaps for *Diogenes* and *despotes*, repeated) may be taking its place. Equally one variety of the one-third miliaresion of Constantine X [964–5] may belong to Constantine IX since no family name is given. A notably interesting title occurs under Michael VI and Isaac I, for each of these emperors calls himself *orthodoxos*. This represents an assertion of the rightness of Byzantine theological beliefs in the face of the schism with Rome resulting from the papal excommunication of the Patriarch of Constantinople in 1054.

## Copper coinage (Pls 56, 57)

The copper coinage of the period 969–1081 consists entirely of folles. A half follis has been ascribed to Michael VII, but it is more probably a pattern histamenon. The folles fall into two groups, the so-called Anonymous Folles – they are not, strictly speaking, anonymous, for many issues were struck in the name of Christ as King, and Metcalf prefers to call them the *Rex Regnantium* coinage – and folles bearing the names of specific emperors or of claimants to the throne. The Anonymous series started in 970, and since it continued down to Alexius I's monetary reform its history will be traced here down to 1092, even though this goes beyond the chronological limits of the present chapter. The signed coinage was revived by Constantine X (1059–67) in the mid-eleventh century. There are no folles bearing the names of emperors from John I Zimisce through Isaac I, while subsequently signed and unsigned folles were in production simultaneously over a period of some thirty years (c. 1060–c. 1090).

The Anonymous Folles consist of a sequence of eleven classes which have on the obverse a representation of Christ or the Virgin, and on the reverse a religious inscription, a representation of the Virgin, or a cross with associated symbols. The normal inscription, when one is present, is  $\text{IHS}\chi\text{S XPIST}\chi\text{S BASILE}\chi\text{ BASILE}$  (i.e. *Rex Regum* or *Rex Regnantium*), either in full or with the first two words abbreviated to  $\text{IS XS}$ . The eleventh-century historian Scylitzes ascribes the introduction of the coinage to John Zimisce's piety and desire to give due honour to the Saviour; it may also have been regarded as useful religious propaganda in provinces newly conquered from the Arabs. Its introduction by Zimisce is at least beyond dispute. There are no signed folles bearing his name or effigy, and the earliest Anonymous Folles, of Class A1, are normally found overstruck on coins of Nicephorus II or Constantine VII.

The broad chronology of the coinage is by now, after several false starts, fairly clear. Sabatier attributed to John Zimisce the coins of what are today termed Classes A, B, C, D, G and K, ignoring the need to provide any for his successors; Classes H, I, J and L he gave to the Latin emperors after 1204, since no coins of these were otherwise known. Wroth accepted the same broad division of classes but distributed them differently: the first group he divided between the emperors from Zimisce to Constantine X inclusive; the later ones, on the strength of Schlumberger's quite unfounded assertion that they were commonly found in Syria and rarely elsewhere, he transferred to the crusaders in Syria at the time of the First Crusade. Wroth's attributions of the first group to particular emperors were based partly on the overstriking of one type on another and partly on the assumption that when the same ornaments appear on both gold and copper they are likely to have been in use simultaneously, an assumption which subsequent research has not endorsed. It was left for Bellinger, basing himself on the great numbers of overstruck coins found in the Corinth excavations, to bring together all the Anonymous classes and propose a new classification. This was subsequently modified on points of detail by Whitting and Piper in the light of

overstrikes in their respective collections, and by Margaret Thompson on the basis of vast numbers of overstruck Anonymous coins from the Agora excavations at Athens. Even apart from the need to revise some of its details Bellinger's scheme was awkward to use, since his plates and his text were differently numbered and both employed Roman numerals, leading to easy confusion with the similar system of Wroth. Miss Thompson replaced these by the system of alphabetical references which is in general use today.

The types, numbering and current attributions of the eleven classes are set out on Table 13, and the coins are illustrated on Pls 56–7. The table differs in three particulars from that given in *DOC* 3, 638, for it has eliminated Classes L, M and N. Classes L and M, which are extremely rare, are now recognized as part of a local coinage of Trebizond (see pp. 228–9). Class N is not 'Anonymous' at all, but bears the name of an emperor, Nicephorus, and is discussed below (p. 209). The attribution of the Anonymous classes to individual rulers is best avoided, since while from Class G onwards the coins are often overstruck on others with the names of effigies of emperors and so can be approximately dated, there is no reason to suppose that changes of type coincided with changes of ruler. The attributions before Class G are hypothetical, save for Class A, which certainly covers the reigns of John Zimisces and most or all of that of Basil II, and Class C, which is certainly connected with the empress Zoe. Nor are all the classes as common as those of A–C and some of the later ones; Classes D, E and F are notably rare. But, despite the evidence of over 4000 specimens from Athens and Corinth, generalizations on such matters can be only tentative, since hoards and site finds often point in different directions. The coins were much counterfeited at the time. Bellinger published a plate of miscellaneous imitations and the finding of an entire hoard of counterfeits in Bulgaria has been recorded. An imitation of Class B is shown on the plate [985].

Class A, the earliest of the series, with a facing bust of Christ on the obverse and a four-line inscription on the reverse, is relatively uniform in style but not in module or weight, or in the details of the design. It is divided into two subclasses, A1 and A2. Coins of Class A1 [980], which are very uniform in size (20–25 mm) and weight (5–8 g), are without privy marks and are almost invariably found overstruck on folles of Nicephorus II, Constantine VII or Romanus I, while in Class A2 [981–3] there is no overstriking and privy marks are invariably present. Coins of Class A1 are in consequence generally taken to represent the initial issue of the reign of John Zimisces and the early years of Basil II, perhaps down to the battle of Abydos in 989. Although this view has been disputed, either on the ground of their rarity in some site finds or because new issues generally start with heavy coins and proceed to light ones later, the balance of probability is in its favour.

Coins of Class A2 are more interesting than those of Class A1. They are usually 25–30 mm in diameter and 11–14 g in weight, but can rise as high as 35 mm and 20 g, giving them a size not far short of that of the largest class of folles struck by Justinian in the sixth century. The largest size merges gradually into the medium one without it being possible, at least on present evidence, to draw a definite line between them. The privy marks which characterize the class take the form of ornaments in the nimbus of Christ and on the cover of the Gospel

Table 13 Classes of the Anonymous Folles

Class	Description	Class and attribution			Predominant combination
		Wroth	Bellinger	Miss Thompson	
A1	Bust of Christ./ } small module Four lines inscr.	I	I (small) John I	A1 John I	Over Nicephorus II and Constantine VIII
A2	Bust of Christ./ } large module Four lines inscr.	John I – Romanus III	I (large) Basil II – Romanus III	A2 Basil II, Constantine VIII	—
B	Bust of Christ./Cross on steps with inscr.	II Michael IV	II Michael IV	B Romanus III	Over A2
C	Half-figure of Christ./Jewelled cross, IS XS  NI KA	III Theodora	III Constantine IX	C Michael IV	Over B
D	Christ seated, throne with back./ Three lines inscr.	V Constantine X	VI Isaac I	D Constantine IX	Over C
E	Bust of Christ./Three lines inscr.	VI Isaac I	IV Theodora	E Isaac I	Rare, sometimes over A2
F	Christ seated, backless throne./ Three lines inscr.	IV Michael VI	V Michael VI	F Constantine X	Rare, sometimes over E
G	Bust of Christ./Bust of Virgin.	VII Constantine IX	VII Michael VII	G Romanus IV	Over Constantine X and sometimes over Romanus IV
H	Bust of Christ./Patriarchal cross on leaved base.	Crusaders temp. Alexius I	VIII Alexius I	H Michael VII	Nicephorus III over H
I	Bust of Christ./Cross with X on leaved base.		IX, XII Alexius I	I Nicephorus III	Over Michael VII
J	Bust of Christ./Cross above crescent.		X Alexius I	J Alexius I	Over Nicephorus III
K	Bust of Christ./Virgin standing. Globule borders.	VIII Constantine IX	XI Alexius I	K Alexius I	Over J

Book on the obverse, and above and beneath the four lines of inscription on the reverse. A table of variant forms was worked out by Bellinger, and this, slightly expanded but retaining his basic numbering, is reproduced on p. 208 from *DOC* 3, 645, where such changes as have been made are explained. Although in some respects unsatisfactory, since it ignores the weights and sizes of the coins and separates some varieties that were certainly issued very close together, it is best left in its present form until a full-scale study of the Anonymous coinage as a whole is undertaken.

The meaning of these symbols, which are clearly something more than ornamental, has been much discussed. One view is that they served mainly to identify mints, and the varying proportions of them occurring in excavation finds have been interpreted on these lines. Metcalf has argued, for example, that Varieties 2–5, 7–9 and 20, which he grouped together as forming a single class, were minted somewhere in central Greece, since they made up 54 per cent of the coins of Class A found at Corinth and 61 per cent of those at Athens, as against only 16 per cent in a lot of similar coins alleged to have come from south-eastern Turkey. Unfortunately they made up 41 per cent of the coins of Class A found at Antioch, which seems to dispose of this particular attempt at localization, and while it may well be that all the coins were not struck at Constantinople, it does not seem possible that the privy marks were used to identify mints. More likely, perhaps, is the theory that they represent dates, with marks changed every year, for the number that have been listed correspond fairly closely to the length of time over which Class A was apparently issued. Whether this is so or not, however, can only be decided in the light of further research.

Classes B–K differ from Class A2 in that they no longer have privy marks and they show a great deal of overstriking, coins of the later classes being almost invariably overstruck on those of earlier ones. The types are shown on Pls 56–7 [984–94] and require little comment. The half-figure of Christ on Class C [986] represents the icon known as the Antiphonetes, referred to above, and some of the others may well reproduce famous icons of the day. As with Class A, there is the problem of where they were minted. The great majority were presumably struck at Constantinople, but Whitting's work on them led him to believe that a number of mints must have been involved. One reason is the rarity of Classes D, E and F and the uncertainty in which students have found themselves over their order of issue. They all have essentially the same reverse type –  $\overline{\text{IS}} \overline{\text{XS}} \parallel \text{BASILE} \parallel \text{BASIL}$  with an ornament above and below – and the situation would be simplified if one could envisage them as a single issue, with three mints interpreting differently a general instruction to use a figure of Christ as an obverse type. Similarly, one could avoid the difficulty numismatists have felt over admitting the apparently simultaneous issue of signed and anonymous coins in the same mint, with the dies for one being used indiscriminately to overstrike specimens of the other. The coins could be attributed to different mints, or at least one could assume enough leeway between the timetables of different mints to explain why there exist, say, coins of Class G overstruck on signed coins of Romanus IV and also coins of Romanus IV overstruck on ones of Class G.

Table 14 Ornaments on the Anonymous Folles, Class A2

Obverse		Reverse		No.	Obverse		Re
In cross	On book	Above inscription	Below inscription		In cross	On book	Above inscription
}	.	— ㄣ ㄣ —	— ㄣ ㄣ —	24b	}	䄀	.
		— 〰 —	— 〰 —	25		䄀	— ㄣ —
}	.	nothing	nothing	26	}	䄀	— ㄣ —
		nothing	.	27		䄀	— ㄣ —
		.	nothing	29		✱	— 〰 —
		.	.	30		䄀	— 〰 —
		—	—	31		䄀	— 〰 —
		— —	— —	32		+	+
		— . —	— . —	32a		(?)	— 〰 —
		ㄣ	ㄣ	33		䄀	— 〰 —
		— ㄣ —	— ㄣ —	33a		䄀	— 〰 —
		✱ (?)	✱ (?)	34		(?)	— ✱ —
		✱	✱	35		䄀	— 〰 —
		— ✱ —	— ✱ —	36		䄀	— 〰 —
		— 〰 —	— 〰 —	38		(?)	— 〰 —
		— 〰 —	— 〰 —	39		䄀	— 〰 —
		— 〰 —	— 〰 —	40		䄀	— 〰 —
		— .A. —	— .A. —	40a		䄀	— 〰 —
		— A —	— A —	40b		䄀	— 〰 —
		— A —	— A —	41		✱	— 〰 —
		— .A. —	— .A. —	42		(?)	— A —
		— h —	— h —	42a		✱	— 〰 —
		— R —	— R —	42b		✱	(?)
		— P —	— P —	43		✱	— C —
		— 〰 —	— 〰 —	45		䄀	— 〰 —
		nothing	.	47		䄀	— 〰 —
		— ✱ —	— ✱ —	48		䄀	— 〰 —
		— 〰 —	— 〰 —	49		䄀	— 〰 —
		— 〰 —	— 〰 —	50		䄀	— 〰 —
		— 〰 —	— 〰 —	51		䄀	— 〰 —
		(?)	(?)				

Certainly the introduction of a new class did not involve the demonetization of earlier issues, for hoards of the period are very mixed in character.

The constant overstriking to which the coins were subjected makes it impossible to say anything precise about their weights. On the assumption that those of Class A1 were of the same standard as those of Nicephorus II and Constantine VII they could have been struck about 40 to the pound, weighing about 8 g each. The heaviest series of Class A2 must have been about 18 g, or 18 to the pound, though substantially heavier ones are sometimes found [981], while the medium ones of the same class and the coins of Classes B–G can be put at about 13 g, or 24 to the pound. There was then a sharp drop, for coins of Classes H–K weigh only about 6 g, perhaps 54 to the pound. The practice of constantly using old coins as flans can have made any prescribed weight only approximate, though presumably some theoretical figure was laid down for the mint.

The method of reckoning in terms of money of account is also unclear, and can scarcely have remained unchanged throughout the period. Under Alexius I the ratio of 288 folles to the nomisma was regarded as traditional, and the fact that the fall in weight with Class H of the Anonymous Folles coincides with the rapid debasement of the nomisma in the 1070s suggests an attempt to maintain at a uniform figure the ratio between the denominations. But it is quite uncertain how the follis was reckoned in the tenth century or how many of the heaviest coins of Class A2 went to the nomisma. If the largest of Justinian's folles had been 180 to the solidus it does not seem likely that those of Basil II's reign could have stood at 288. Such a figure would be quite acceptable, however, for the medium coins of Class A2 and for those of Classes B–G which followed them.

The revived 'signed' coinage of the emperor Constantine X and his successors is shown on Pl. 57. Its weight pattern coincides with that of the Anonymous issues and there are few problems of identification. The coins of Constantine X [995, 996] and Michael VII [998] bear the emperor's name, though Eudocia's presence on the first issue of Constantine has not been satisfactorily explained. The letters in the field on the reverse types of Romanus IV [997] and Nicephorus III [999] raise problems of interpretation, for while RΔ and NΔ stand respectively for 'the despot Romanus' and 'the despot Nicephorus', and R (= B) and φ for βοήθει or φύλαττε ('protect', 'guard'), the C could stand for K (i.e. Κύριε, 'O Lord') or for Σ (i.e. Σταυρὲ, 'May the Cross ...'). Since it has been shown that by this date C on the coins had ceased to be used as K the latter interpretation is the more probable, more especially since the word is sometimes spelt out in full on seals of the period (e.g. Σταυρὲ φύλαττε Κυριακὸν οἰκέτην, 'May the Cross guard Kyriakos the servant'). The only problems over identification arise with the two last coins on the plate [1000, 1001], both of which are extremely rare and were clearly struck by the two would-be usurpers of the years 1077/8, Nicephorus Bryennius and Nicephorus Basilacius. CBNB could equally well apply to either, and while the inscription on the second coin apparently gives the emperor's family name, even the best preserved of the three recorded specimens has nothing legible further than ΝΙΚΗΦΩΡΟC. Until a better specimen becomes available these two attributions must remain uncertain.

There are problems in identifying the mint or mints of the signed folles. Wroth attributed them all to Constantinople, although this involves the improbability of their being struck in the same mint and at the same time as the Anonymous types. Hendy would give them all to Thessalonica. The evidence of mutual overstriking and of find material seems to me against this. While signed coins of Michael VII are commonly overstruck on those of Romanus IV, which in turn are commonly overstruck on those of Constantine X, coins of Nicephorus III are almost never overstruck on any of these classes, which suggests that they originated in some locality where the earlier signed groups did not form a large proportion of the circulating medium. Corinth or Athens itself would fulfil these conditions, since excavation in both places has brought to light enormous numbers of coins of Nicephorus III and very few earlier signed ones, but such an interpretation may well be influenced by the fact that it is only these localities that have been excavated on such a scale. It is possible that the earlier signed coins should be distributed between two mints, since for each emperor there are two groups of coins which in the cases of Romanus IV and Michael VII diverge only slightly and in such a manner as to suggest the existence of two mints interpreting identical instructions in slightly different fashions. The evidence of provenance and distribution may eventually throw light on the matter, but at present we have insufficient material for any useful conclusion.



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# THE COMNENI AND ANGELI, 1081–1204

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## General features

The typical coinage of the Comnenid and Angelid periods began with Alexius I's monetary reform of 1092, not with his accession to the throne in 1081, while the coinages of the several successor states after 1204 are for the most part no more than continuations of that of the later twelfth century. But the dates 1081 and 1204 are historically so important that even if neither of them saw any significant change in the coinage pattern, the numismatic history of the years between them can best be treated as a single entity. The year 1081 was significant less because it marked the beginning of a new dynasty than because it inaugurated a series of long reigns, each extending over several decades, that contrasted with the feverish succession of short reigns and political instability from which the Empire had suffered since 1025. The year 1204 is important because it saw the capture of Constantinople by the Latins and the ensuing fragmentation of the Empire, a disaster from which, despite the Greek recapture of the city in 1261, Byzantium never recovered.

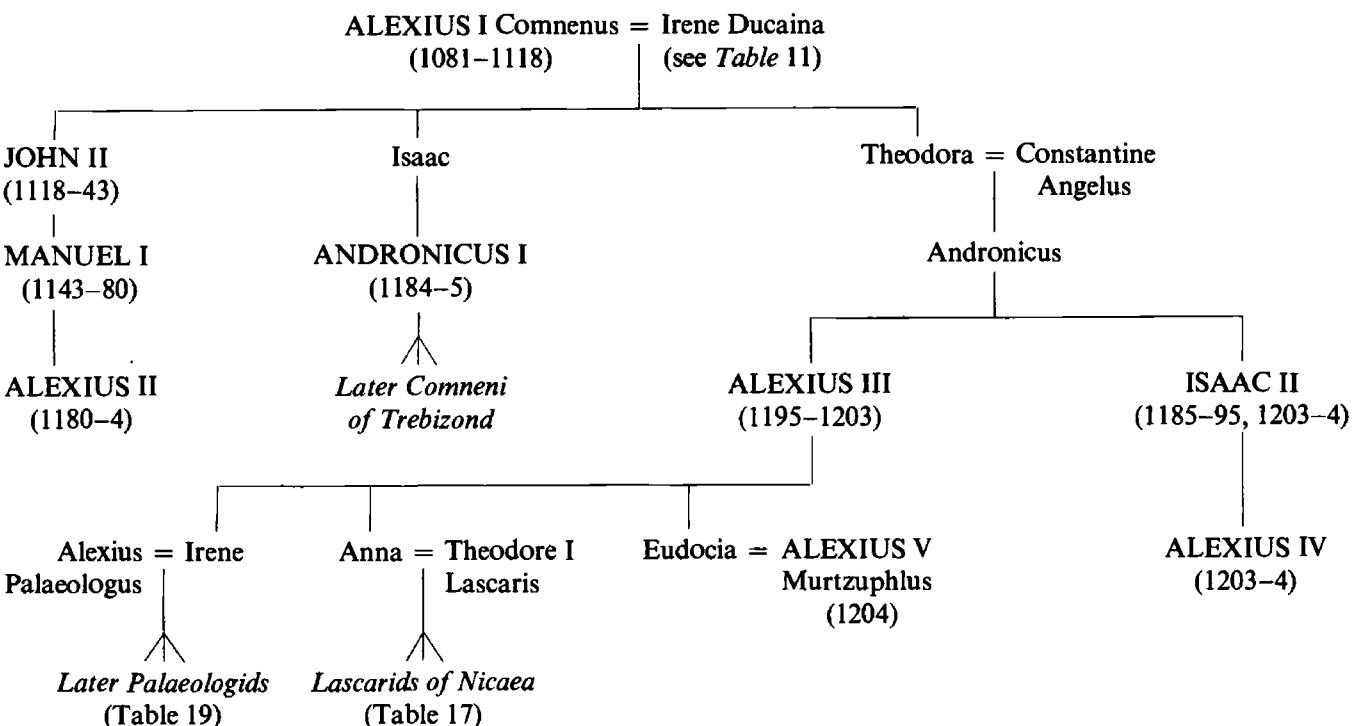
The emperors who ruled during the period 1081–1204 were ten in number. There were in addition two pretenders, in Asia Minor and Cyprus respectively, who never succeeded in occupying the capital.

Alexius I Comnenus	1081–1118
John II Comnenus	1118–43
Manuel I Comnenus	1143–80
Alexius II Comnenus	1180–4
Andronicus I Comnenus	1184–5
Isaac Ducas Comnenus, usurper in Cyprus	1184–91
Isaac II Angelus	1185–95

Theodore Mankaphas, usurper in Asia Minor	1189–90, 1204–8
Alexius III Angelus	1195–1203
Isaac II, restored with Alexius IV	1203–4
Alexius IV Angelus	1203–4
Alexius V 'Murtzuphlus'	1204

With the exception of Alexius V, the emperors were all members of one or other of the two families of Comnenus and Angelus, who like most of the great houses of the period were related by marriage, as can be seen from the accompanying table. A conspicuous feature of this phase of Byzantine history is the existence of a higher aristocracy whose members were great landed proprietors rather than successful generals or members of the central civil service, and whose allegiance had to be bought by frequent marriages into the imperial family accompanied by concessions of lands and titles. This was not a complete innovation. The introduction of family names on the coinage in the eleventh century (see p. 189) had been an outward sign of changes in the structure of central authority, and multiple family names – Comnenus Ducas, Ducas Lascaris, Ducas Angelus, Comnenus Palaeologus – were to be a prominent feature of the twelfth and thirteenth centuries. They were in part an expression of the way in which the prestige of imperial power was now thought of as extending to all

Table 15 The Comneni and Angeli, 1081–1204



members of the emperor's family, however distant, instead of being something limited to those of his closest relations whom he promoted to co-rulership, as had earlier been the case.

It would be a mistake to treat the Comnenid period as if it were one of unrelieved misfortune or decadence. It is true that the sequence of short reigns that preceded the usurpation of Alexius Comnenus had gravely weakened the central government, and the serious nature of the military disasters of the 1070s and 1080s can hardly be exaggerated. Quite apart from the psychological shock of the defeat of Manzikert and the capture of the emperor, most of central and western Asia Minor had been overrun by the Seljuq Turks, all the northern Balkans had been occupied or devastated by the Slavs and by various nomadic peoples of whom the most important were the Cumans and Patzinaks, and southern Italy had been irretrievably lost to the Normans. But in the long reign of Alexius I much lost ground was retrieved. The further advance of the Normans across the Adriatic was thrown back, the Danube frontier was in large measure restored, and even the coastlands and rich river valleys of western Asia Minor were reoccupied, leaving only the less valuable interior to the Seljuq sultans. The coinage system, which had fallen into complete disorder, was reformed in 1092, and Alexius' diplomatic skills turned to his advantage even the First Crusade, which at first had seemed to promise little good to the Empire. His two successors, John II and Manuel I, were to rank amongst the most powerful and influential rulers of the day.

But the mere fact that their position can be so formulated is symptomatic of a decline in status, for the emperor, however grandiose or unique his position might be in Byzantine eyes, was now only one amongst several rulers of comparable status with interests in the eastern Mediterranean. The consequences became apparent when a new cycle of misfortunes began in the 1170s. Manuel's western policies and interests too often involved him in costly and irresponsible meddling in areas where no imperial interests were engaged, and his defeat at Myrioccephalon by the Turks in 1176 was a catastrophe which he himself compared to Manzikert. With his death in 1180 the sequence of short and unhappy reigns was resumed. The young and incapable Alexius II was deposed and murdered by his cousin Andronicus I (1184), who a year later was himself overthrown and torn to pieces in a popular insurrection. Isaac II Angelus came to power as representative of an aristocracy angered by Andronicus' autocratic policies, and was content to rule the Empire, it has been observed, 'as though he were the head of a family estate'.

The 'estate', however, was well on the way to disintegration, for much of the north Balkans was lost in a Bulgarian revolt (see p. 237) and Cyprus became independent under Isaac Ducas Comnenus, a grand-nephew of the emperor Manuel, though the line of descent is uncertain. Isaac II was deposed and blinded in 1195 by his elder brother Alexius III, who showed no greater capacity for government. In 1203 the army of the Fourth Crusade appeared before Constantinople, ostensibly in the interests of the deposed Isaac II and his son Alexius, who had escaped from the capital and promised Byzantine support for the

crusade in return for his father's restoration. Alexius III fled the capital, but the subservience of Isaac and Alexius IV to the Latins provoked a popular rising that made plain Alexius' inability to carry out his undertakings. Isaac II died of fright during the rising, and the incapable Alexius IV was murdered shortly afterwards by the Protovestiaris Alexius (V), nicknamed Murtzuphlus, whom he had been rash enough to associate with himself as co-emperor. The Latin leaders, by now thoroughly exasperated with the incapacity of the government, and with the weakness of Constantinople plain before them, laid siege to the city, and on 12 April 1204 broke through its defences and began its three-day sack. Alexius V fled, to be blinded later by Alexius III and subsequently put to death by the Latins, and the Empire, or as much of it as the Crusaders could occupy, was divided between the Venetians and the Franks.

Coins are known of all these emperors except Alexius II and Alexius V. The reign of Alexius IV was until recently also regarded as a gap, but a solitary coin of this ruler is now known. The four-year gap of Alexius II's reign is hard to explain, but he was only fourteen at his accession and his cousin Andronicus, who was formally co-ruler during the year October 1183 to September 1184, would not have been anxious to encourage minting in the name of someone whom he intended to supplant. The mint presumably carried on issuing the last coinage of Manuel I. As for the two pretenders, there are a number of coins which can be attributed with confidence to Isaac of Cyprus and some very rare ones of Theodore Mankaphas, minted presumably at Philadelphia. The tradition of the Anonymous Folles was in the late eleventh century continued for a time at Trebizond, where a semi-autonomous copper coinage existed in the reign of Alexius I and probably for some decades later.

Difficulties have arisen in the past over the correct attribution of coins bearing the names of Alexius, John and Isaac, and there are others over those of Manuel I and several later rulers. Thessalonican coins of Alexius I were given by Sabatier and Wroth to Alexius III, but this confusion has now been sorted out and should not cause trouble in the future. The problem with John II's coins arises out of the fact that John III Vatatzes, emperor of Nicaea (1222–54), revived some of his predecessor's types and used on them the title of *porphyrogenitus*, to which in strictness he was not entitled. The distinction between their coins is discussed in the next chapter (pp. 247–8). The problem with Isaac is mainly that of separating coins of the emperor Isaac II (Angelus) from those of the usurper Isaac (Ducas Comnenus) of Cyprus. Finally, Hendy's analysis of the coinage of the post-1204 period showed that a number of light-weight and badly struck coins bearing the names of Manuel I and his successors are in fact later, and better attributed to the Bulgarians or the Latins.

A peculiarity of the Comnenid and Angelid periods is the almost complete absence from the coinage of the names of associated emperors. Such coinages had traditionally been a standard way of bringing before the public the identity of a ruler's accepted successor. But although a high proportion of twelfth-century coins do show two figures, these are always

the emperor and some heavenly personage, not the emperor and a colleague. The only exceptions are the rare coins struck in 1092, to mark the coronation of John II, which have on the obverse Alexius I and his wife Irene and on the reverse John II and Christ. But the young emperor is omitted from the coins of the remainder of Alexius' reign, when one would have expected him to be shown, and this omission must have been deliberate. Further, although the absence of coins of John II with Manuel is due to the fact that the latter was only nominated on his father's deathbed, there are no coins of either the joint reign of John II and his eldest son Alexius, who was crowned emperor in 1122 but died in 1142 during John's lifetime, or, as we have seen, of the joint reign of Alexius II and Andronicus I. One must therefore conclude that the absence of associative coinages was due to a change in constitutional practice, not to any negligence by the mint.

The decisive event in the history of twelfth-century coinage was the great monetary reform of 1092. The coinage which Alexius I had inherited from Nicephorus III was in an advanced stage of decline, with the two denominations of gold, the full-weight *histamenon* and the slightly lighter *tetarteron*, only about 8 carats fine. In the first years of his reign Alexius, beset by difficulties on every hand, debased them still further, so that modern collectors have often treated the 'gold' coins as silver or even billon, not recognizing the presence of any gold content at all. The silver *miliaresion* and its fractions had virtually ceased to be issued, and even the *folles* had declined sharply in weight. *Folles* of Anonymous Classes H-K, which spanned the period of the 1070s and 1080s, are usually of about 6g, struck perhaps 54 to the pound, instead of the 12/13g of the preceding decades. Alexius swept this whole system away and replaced it with a new one whose essential feature was the use of several denominations of alloyed concave coins, uniform in weight but quite distinct in metallic content. The basic elements of the new coinage were first worked out by Hendy, who managed to isolate the various denominations whose similarities in weight and fabric had up to then concealed the differences between them.

The concave coins in the new system were of three denominations. A gold *hyperpyron* replaced the old *histamenon*, but although it was of the traditional weight (4.5g) it was only  $20\frac{1}{2}$  carats fine. Beneath it was an *electrum* third *hyperpyron*, in some sort a revival of the old *tremissis*, of the same weight as the full *hyperpyron* but only about 6 carats fine, the difference between this and nearly 7 carats, which one might expect, being accounted for by the value of the silver in the alloy. The third denomination, known as a *trachy* or *stamenon* and of poor quality billon (c. 6/7 per cent silver), was worth 1/16th of the third *hyperpyron* and 1/48th of the full *hyperpyron*. Finally, at the bottom of the scale were two flat copper coins, the *tetarteron* and half *tetarteron*, much smaller than the old *folles*, whose exchange ratio with the *trachy* is uncertain but which may have been its eighteenth and thirty-sixth respectively. The relationships between the traditional monetary units and the new denominations were therefore initially as follows, the values of the *tetarteron* and its half being conjectural:

hyperpyron	electrum trachy	(miliaresion)	(keration)	billon trachy	(follis)	tetarteron	half tetarteron
1	3	12	24	48	288	864	1728
	1	4	8	16	96	288	576
		1	2	4	24	72	144
			1	2	12	36	72
				1	6	18	36
					1	3	6
						1	2

The miliaresion and the follis continued for only a short time as units of account, but the keration remained in use in this capacity, as 1/24th of the hyperpyron, to the end of the Empire, and it was in hyperpyra and keratia that prices were to be normally expressed in the future.

This retention of the keration as a money of account was probably in part due to a further debasement of the fractional coinage in the later twelfth century, which rendered unstable the ratios between the actual coins. We know from the analyses obtained by Hendy that although the fineness of the hyperpyron remained unchanged, that of the electrum trachy was reduced during the reign of Isaac II to about 3 carats, at which figure it remained under Alexius III. This debasement, which is alluded to by the contemporary historian Choniates, must have affected the exchange ratio between the hyperpyron and the electrum coin, but what the latter fell to we do not know. The silver content of the billon trachy likewise declined from about 7 per cent, at which it had stood early in Manuel's reign, to about 3 per cent under Isaac II and  $2\frac{1}{2}$  per cent under Alexius III. Choniates' statement that Manuel put debased silver (ἀργύριον ἁδόκιμον) into the nomisma must refer to this, for the gold hyperpyron was untouched, and hoard evidence indicates that users made a distinction between Manuel's two earlier and two later coinages. One cannot assume a proportional fall in the exchange values, since the billon trachy had been overvalued from the first and any overissue, as may well have occurred in the later years of Manuel, would have affected the ratio. A convention between Frederick Barbarossa and Isaac II in 1190 shows that 120 billon trachea were at that time reckoned to the hyperpyron, while Pisan documents of 1199 imply a further reduction to 184. The value of the tetarteron, whose weight was substantially reduced and which under Manuel was issued in great quantities, must also have greatly changed, but we have at present insufficient evidence for constructing a table of relative values in the later years of the century. Although the weight and fineness of what westerners called the bezant remained unaffected, one assumes that there must have been considerable inflation within the Empire itself.

The terminology of the new system is complicated, for documents of the eleventh and twelfth centuries sometimes use general terms applicable to the denominations as a whole

and sometimes specific ones referring to the coins used in particular transactions. The distinction between the two is not always clear, since at all times specific coin names, if used over long-enough periods, tend to become general and lose all connection with the type or other feature on which they were originally based. (The English term ‘guinea’ remained in use long after the coin of this name had ceased to be made from West African gold, and most English ‘crowns’ have no crown at all upon them as part of their type.) Our main information about twelfth-century coin names comes from the so-called *Typica* of great monastic foundations, i.e. the charters or other ordinances laying down rules for their administration. The most valuable of these is the *Typicon* of John II setting up the hospital of the Pantocrator at Constantinople in 1136, since this gives details of the payments due to a wide range of officials and figures for miscellaneous expenses that would be incurred in the course of the year. The essential terms are as follows.

### *Hyperpyron*

This is the term most frequently applied in the *Typicon* to the 20½-carat gold coin which was the keystone of the reformed coinage, though it can also be called simply ‘the gold coin’ (τὸ νόμισμα χρυσοῦν). Payments are sometimes specified as being due in ‘old’ (παλαιά) or in ‘newly struck’ (καινούργια) ones, the two terms not implying any formal difference in value but the former putting the recipient at a slight disadvantage if he had to make payments on his own account by weight. The word itself comes from ὑπέρ (‘above’) and πύρ (‘fire’), meaning a coin of highly refined gold, for although the hyperpyron was by no means pure it was much superior to the debased histamenon which it replaced. In western languages the first syllable was usually dropped, so that the word tended to become *perperum* (Lat.) or *perpero* (Ital.). The hyperpyron is also called in the *Typicon* a ‘Mother of God’ nomisma (τὸ νόμισμα θεοτόκιον), this specifically meaning the coin actually being issued at the date of the document and showing the figure of the emperor with the Virgin [1064–8]. The term *theotokion*, however, was also applied to other coins having an image of the Virgin, like the third hyperpyron of Alexius I, and at no time did it become a general name for any denomination.

The fineness of the new hyperpyron is at first sight difficult to explain, since Alexius could undoubtedly have revived a coin of pure gold if he had been so disposed, but Hendy’s suggestion that it represents the figure to which the histamenon had been reduced under Michael IV, before the main debasement had taken place, may well be correct. Documents from southern Italy, which are more abundant than those from the East, show the term *michaelaton* in regular use during the twelfth century in contexts where only the hyperpyron can have been intended. This is probably the explanation of the curious and much discussed clause in Alexius I’s treaty with Bohemund of 1108, promising the Norman an annual payment of 200 lb in *michaelati*, for the document would have simply used a term to which Bohemund was accustomed and Anna Comnena took it literally as implying coins of one of the emperors named Michael of the preceding century.

*One-third hyperpyron: trikephalon or electrum trachy*

The coin worth a third of a hyperpyron is called in the *Typicon* a 'three-header' (τὸ νόμισμα τρικέφαλον) or a 'St George coin' (τὸ νόμισμα ἁγιογεωργάτον). The latter term referred specifically to the third hyperpyron of John II, with an image of St George, and served to contrast it with the *theotokion* hyperpyron. 'Three-header', however, sometimes appropriately abbreviated to Γ<sup>κα</sup>, was a recurrent term in Byzantine numismatics: in the eleventh century it had been applied to the histamena of Eudocia (1067) showing the standing figure of herself and her two sons; in a diploma of Isaac II it is used of a hyperpyron having on one side the Virgin and on the other the emperor and St Michael; and in the early fourteenth century it is applied to hyperpyra showing Christ with the kneeling figures of Andronicus II and Michael IX. Its use for the third hyperpyron probably went back to the first main issue of this denomination under Alexius I [1039], since while his hyperpyron and third hyperpyron each had on one face a seated figure and on the other a standing one, the seated Virgin on the third hyperpyron bore a medallion of Christ and there were thus three 'heads' on the coin instead of two. The long period during which this type was issued (1092–1118) resulted in *trikephalon* becoming the regular name of the denomination, so that when it is used in the twelfth century without further qualification it can be taken as meaning the electrum trachy. Since it had other meanings, however, it seems preferable in this chapter and the next to term the coin an electrum trachy, while recognizing that this is a modern description and not its proper name.

*Billon trachy or stamenon*

The billon nomisma is termed in the *Typicon* a *trachy aspron nomisma* (τὸ νόμισμα τραχὺ ἄσπρον) or more briefly a *trachy*. Formally the word *trachy*, meaning originally 'rough' and by extension 'not flat', could be applied to any concave coin, and in the later eleventh century, as we have seen, it was applied to the histamenon, the only concave coin in that period apart from occasional miliaresia. By the twelfth century, when the full nomisma had come to be termed a *hyperpyron* and its third a *trikephalon*, the term *trachy* was left free to be used for the denomination of billon. The further term *aspron*, which had originally meant 'rough' in Latin (*asper*) and later came to imply 'silver', was often regarded as superfluous, becoming indeed less and less appropriate as the silver content of the coins sank from an initial 6 per cent to 2 per cent at the end of the twelfth century and in the thirteenth to no more than a trace.

Latin sources from as early as 1147 name the billon trachy a *stamina* or *staminum*, a term evidently borrowed from the Greek (*hi*)*stamenon*. The transfer to a billon coin of a term originally meaning a gold one is explained by the accompanying use of *tetarteron* for the new coins of copper, for the fabric of the two low-value coins, one large and concave and the other small and flat, with irregularly cut edges, exactly reproduced those of the two high-value coins in the former system.



*Tetarteron or tarteron*

The lowest denominations in the new coinage were copper tetartera and half tetartera. Their name is first attested in Latin, when Fulcher of Chartres, in his almost contemporary account of the First Crusade, relates how Alexius I distributed gold and silver coins to the leaders and 'copper coins called *tartarones*' to the rank and file (*peditibus distribui fecit nummis suis aeneis quos vocant tartarones*). The *Typicon* of 1136 records charitable payments on feast days involving many hundreds of *tetartera noummia*, the implication being that they were coins of very low value, and their identity is assured. Although some of the earliest ones are found overstruck on Anonymous Folles of Classes J or K, they are in general substantially smaller than these, and how they were valued in terms of the higher denominations is, as we have seen, uncertain. Half tetartera are not referred to in the documents and seem to have been only occasionally struck.

The three earliest types of these small denominations, dating in and shortly after 1092, were made of lead, not copper, and it is not clear whether they were full tetartera, as Hendy believes, or halves, as seems to me more likely. The low value of lead is in favour of their being halves, but such a conclusion implies that copper tetartera of 1092 are still to be found. In view of the great rarity of the first issue of reformed coins this is not impossible, and the use of lead might well have been suggested to the minting authorities by the difficulty of making very small half tetartera of copper. On the other hand, the use of lead would have emphasized the completeness of the break with the past, with lead bearing the same relation to the old copper as billon did to the former coinage of silver, and it might well have been felt that the projected issues of low-quality billon would absorb all the copper available. The problem must for the moment be left unresolved.

The proliferation of billon trachea and tetartera, both low-value denominations, sets the monetary system of the twelfth century in sharp contrast to that of the tenth, with nothing below the heavy follis and only three denominations in use. It seems to imply a greater intensity of commerce and an extension of urban life, with which an abundant supply of small change has usually been associated. There were, however, regional differences in the circulation of the coins. The excavations at Sardis and Aphrodisias have produced far fewer subsidiary coins, more especially tetartera and half tetartera, than Athens and Corinth. The circulation of copper coins seems in fact to have been practically limited to Greece and the capital. Few of them reached the north Balkans or Asia Minor, and these two regions were in turn differentiated from each other by the much more extensive use of billon trachea in the Balkans.

The fact that after 1092 the only flat coins were the tetartera and half tetartera meant that the external appearance of Byzantine coinage was quite different in the twelfth century from that at any earlier period. To make matters worse, the gold content of the electrum trachea and the silver content of the billon ones were so small that the former often look more like silver and the latter, which tend to be dark grey or brownish-black in colour when uncleaned,

sometimes scarcely look as if they were of metal at all, their surfaces having the leathery or horny appearance which gave the traditional name of 'hornsilver' to silver chloride. Occasionally they have the yellowish colour of brass, owing to the presence of zinc as an impurity, and so must often have been easily mistaken for electrum coins. The lower denominations are often carelessly struck, and owing to the difficulty of ensuring that the curvature of the convex and concave dies matched each other, parts of the designs and inscriptions have often failed to 'take', so that attribution of the coins is sometimes difficult and the exact reconstruction of inscriptions impossible. The billon trachea of the late years of the century are often badly clipped, a phenomenon which will be discussed later. Overstriking is fairly common in Thessalonican tetartera, and is helpful in determining the order of issue. It is rare in the concave coins, though it does occur.

The normal types for the concave denominations throughout the century are a religious figure on the obverse and the emperor, either alone or in company with Christ or a saint, on the reverse. The tetartera rarely have more than a single figure on either side and occasionally replace it by a monogram or by letters in the angles of a cross on steps. Inscriptions in several lines across the field are not used in the twelfth century after the disappearance of the follis, perhaps because the tetartera were substantially smaller, though they were occasionally revived in the thirteenth. The nearest approach to portraiture is the long forked beard of Andronicus I, unusual at the time but more fashionable in the thirteenth and fourteenth centuries, though there are no doubt elements of likeness in the representations of Alexius I and John. Manuel I's earliest coins show him beardless, since he was still a young man at his accession.

Both with Christ and the Virgin there were important innovations. The Christ Child holding a scroll was first used as a coin type under Manuel I, no doubt as a play on his name, for it is the image normally referred to as the 'Christ Emmanuel' type. The Virgin seated on a low throne (*thokos*) and holding a medallion of Christ first appears under Alexius I. Both representations were of great antiquity in other forms of art, and it is surprising that their use on coinage was so long delayed. A standing Virgin, save in association with the emperor, was more rarely figured than in the preceding century, but a new type was introduced under Manuel: the Virgin Hagiosoritissa, standing sideways with hands uplifted in prayer.

Saints now appear on the coinage on an extensive scale. St Michael, represented as a winged archangel, had figured as a coin type only once before on the Thessalonican histamenon of Michael IV [909]. In the later twelfth century he reappears on two denominations of Isaac II from Constantinople [1128–9] and on tetartera of Thessalonica [1134]. There are four newcomers, all of them like Michael belonging to the military hierarchy. St Demetrius, not surprisingly, first appears on the coins of Alexius I struck at Thessalonica [1025–6, 1029], and returns again on a Thessalonican half tetarteron of John II [1078]. St George, shown always as a young man with curly hair, usually armed with sword and shield, first appears on the electrum trachy of the same emperor [1067–8]. St Theodore appears on electrum trachea of Manuel II in company with the emperor [1083–4], as does

St Constantine on all the concave denominations of Alexius III [1135–8]. These saints, apart from the winged St Michael, would not be recognizable if they were not formally named on the coins. There are, in fact, minor copper issues of Alexius III on which the identity of the saint who accompanies the emperor is unclear [1142].

Little need be said regarding coin inscriptions. They are now often arranged in columns on either side of the central type instead of following the circumference, as had been customary in the past. Such a pattern was common in other forms of art, but perhaps was specifically adopted on the coinage because of the tendency for the inscriptions near the edge of the die on concave coins to be illegible. The regular imperial title is *despotes*. The more traditional *basileus* appears only once, on a provincial pre-reform follis of Alexius I [1030]. Alexius regularly uses his family name of Comnenus, while John II and Manuel are each normally styled *porphyrogenitus*. Andronicus I and the two Isaacs call themselves only *despotes*, without family name or further title, but Alexius III takes the surname Comnenus to which he was remotely entitled – his grandmother was a daughter of Alexius I – in preference to using his family name Angelus. The traditional Κύριε βοήθει or Σταυρὲ βοήθει formulae are varied on Alexius I's folles by CΦ (Σταυρὲ φύλαττε, 'O Cross, guard...') or CЄPЄVNЄPΓCI (Σῶτερ συνέργει, 'O Saviour, assist...'), while the cross monogram of MΛΔKΠ on common tetartera of Manuel is composed of his title M(ανουή)A Δ(εσπότης) K(ορμηνός) Π(ορφηρογέννητος) instead of the simple letters of his own name. Some features of the lettering are novel, notably the complex ligaturing. The letters MNH of *Komnenos* are usually run together, as are CT, TH and ΓΩP, while ὁ ἅγιος usually has the form of an O with either a lambda (for alpha) or a simple dot inside it.

The problem of mints is one on which the last word has probably not been said. There are no formal mint-marks on the coins themselves, and, with the exception of an anomalous follis of Alexius I, Wroth was content (p. xcix) to attribute all coins to Constantinople. Later scholars, on the basis of stylistic groupings, iconographic peculiarities, or the presence or absence of what can be construed as officina marks, have attributed many of the coins to varying numbers of provisional mints. Such considerations are not always in themselves decisive, but when conclusions drawn from them can be supported by hoard evidence, or by marked divergencies in the distribution of coins between different excavation sites, they may well become so. Bellinger in 1958 questioned Wroth's conclusions on the ground that the Corinth and Athens excavations showed very different patterns of monetary circulation and that the evidence of hoards suggested the localized use of certain types, and Metcalf subsequently made a long series of detailed proposals for mint identifications in the period. His conclusions, with attributions of coins to Nicaea, Thebes or Corinth, Trebizond, Thessalonica, and even Patras and the Greek islands, have won no acceptance by other scholars, but Hendy's attribution of a substantial amount of twelfth-century coinage to Thessalonica has behind it a sufficiency of stylistic and typological evidence, backed by a distribution pattern markedly different from that of coins attributable to Constantinople, to carry conviction. One may, however, sometimes question the details. Mme Morrisson has

proposed Adrianople as an alternative to Philippopolis, a mint he had proposed for some anomalous coins of Alexius I, and when the attribution of a coin series to two mints requires the details of their designs to have subsequently evolved on closely parallel lines in the two locations, one must question whether the distinction has been correctly made at all.

A further problem arises over the copper, where the difference between mints is usually one of type, not of style, and the evidence for divergent distribution patterns is usually stronger. The contrast between the numbers of equally common types of tetartera and half tetartera found at Corinth and Athens – e.g. 494 and 1387 of Manuel I's 'St George' type as against 6 and 4 of his 'Christ standing' type – is very apparent, and alone would justify their attribution to different mints, in this case 'Thessalonica' and Constantinople. But in fact the 'Thessalonican' types can be broken down further, with groups of good style and high weight, presumably to be attributed to Thessalonica itself, and others of poorer style and fabric that must either have originated in some as yet unidentified mint in Greece or be imitations of a later date, like the billon trachea struck by the Bulgarians and Latins in the names of twelfth-century emperors that have been alluded to already. Hendy assumes the first to be the case, and assigns to a local mint in Greece, perhaps at Thebes, a number of tetartera or half tetartera of Alexius I, Manuel I, Andronicus I and Isaac II. The evidence of the Brauron hoard, and of other deposits, does indeed bear out the view that these coins, or at least a proportion of them, are contemporary with their prototypes, and their attribution to an 'uncertain mint in Greece' is the one that has been followed below. I have some doubts, however, as to whether it is the whole truth, and whether such coins did not continue to be struck in the thirteenth century. The problem is one of importance to non-numismatists, for the dating of most Byzantine pottery of the middle period has been based on the assumption that coins with the names of individual emperors, which have been found in association with fragments of pottery, were struck in their reigns and not at some subsequent date.

Just as there are no mint-marks on twelfth-century coins, so also there are no formal officina letters. Half a century ago, however, the Austrian numismatist Leo Schindler, on the evidence of nearly 150 billon trachea of Isaac II in a hoard he had acquired, suggested that three different types of decoration on the emperor's loros (a star pattern, five pellets forming a quincunx, and a similar quincunx with a circle round the central pellet) might have been intended to identify three distinct officinae, for the same patterns are found in the reigns of Manuel I and Alexius III and one of them in that of Andronicus I. In the 1960s this idea was further explored by Metcalf in a minute analysis of a hoard from southern Serbia, and very systematically by Hendy in his monograph on the coinage of the twelfth and thirteenth centuries. Hendy's research has made it clear that what appear at first sight to be casual details in the emperor's costume – the form of the pendilia, the number of pellets in the collar-piece, the decoration of the loros-waist – were carefully regulated, and reflect the internal structure and working of the mint. Whether they were officinae in the old sense of the term is perhaps not certain, though the relatively small number of structural units which emerge suggests that they may have been. Their fewness contrasts with the great variety of

*segni* that occur on much of the coinage of the thirteenth and fourteenth centuries. These appear to identify actual mint-masters, like their counterparts at Venice whose meaning is revealed by mint records (see pp. 26, 243), perhaps because a new structure had to be elaborated in the mints set up in the provinces after that of Constantinople fell under Latin control.

## The pre-reform coinage of Alexius I, 1081–92

The pre-reform coinage of Alexius I is essentially a continuation of that of Nicephorus III, though with one novel type struck at Thessalonica. Its background was one of extreme political and financial difficulty. The Seljuq Turks were in occupation of most of Asia Minor, the Normans aimed at continuing in Greece the career of conquest that had already made them masters of south Italy, and the Patzinaks from across the Danube were subjecting the eastern Balkans to constant and devastating raids. Robert Guiscard's death in 1085 brought the immediate Norman danger to an end, but the Patzinaks had still to be dealt with, and it was not until the early 1090s that Alexius was free of major difficulties, although others were soon to be created by the Crusaders. Anna Comnena relates how in 1081, after the Norman victory at Durazzo, when troops had to be raised at all costs and money found to pay them, Alexius instructed the regents at Constantinople to call in for melting the plate and ornaments of his family and supporters and ordered the confiscation of much of the 'superfluous' wealth of the Church in gold and silver. It is to this period that the chronicler Zonaras alludes when he describes how the emperor, having inherited a coinage already debased, carried debasement still further, melting down public monuments and old 'obols' (i.e. heavy folles) to obtain copper, and confusing the public by the varying finenesses of the coins in which taxes were expected to be paid. Taken as a whole, the coinage of these two decades was in its metallic content, although not in its standards of striking, one of the worst which the Empire experienced in the long course of its history.

The Constantinopolitan *histamena* are of two main classes, preceded by a brief transitional issue represented by a unique specimen in Berlin [1016]. Its obverse shows Christ seated on a high-backed throne, its reverse a standing figure of the emperor copied from that of Nicephorus, with the emperor holding a labarum bearing an X on its shaft. Class I [1017] continues the obverse of this transitional issue, but replaces the standing figure of the emperor by a bust holding a sceptre and globus cruciger, the emperor's 'portrait' being noticeably different from the earlier one and this time intended to give an impression of Alexius' actual appearance. Class II [1018] replaces the seated Christ by a facing bust, and provides the emperor with a different type of sceptre. The order of issue of Classes I and II is determined by the fact that while coins of Class I are in general of poor-quality electrum (3 carats) but sometimes seem to be only silver and copper, those of Class II are apparently only the latter. Hendy suggests that Class II may perhaps have been introduced in the winter of

1081/2, when Alexius' financial difficulties were at their most acute, but the relative rarity of the two issues does not suggest that Class I had as short a life as this would imply.

There were two classes of tetartera, one having a bust [1019] and the other a standing figure [1020] on each face, their alloys being apparently similar to that of the gold coins. The 'silver' denominations are a concave miliaresion with standing figures of the Virgin and the emperor [1021] and flat two-thirds and one-third miliaresia [1022, 1023], with two slightly differing figures of the Virgin and long and short inscriptions respectively. Hendy assigns no signed folles to Constantinople, but the Anonymous Folles of Classes I, J and K [992–4], having on their reverses a cross on a leaved base, a cross above a crescent, and a half-figure of the Virgin respectively, supplied the small change of these two decades.

The issues which can be assigned with some confidence to Thessalonica include those which Wroth gave to Alexius III. They are fewer in number than the types attributable to Constantinople and were probably struck over a shorter period, i.e. between 1081, when the emperor first established his military headquarters at Thessalonica during the Norman war, and 1085, when the war virtually ended. There are two issues of a concave histamenon. The first [1025], showing St Demetrius, nimbate and holding a sword, handing a labarum to the emperor, is usually of poor-quality electrum and can be conjecturally dated 1081/2. The second [1026], substituting a cross on steps for a labarum and of still poorer quality, probably belongs to 1082–5. The attribution to Thessalonica is justified by the use of St Demetrius in the type and our knowledge of the circumstances of these years, while the actual model was provided by the Thessalonican issue of Michael IV of forty years before [909]. These coins must be the *dimitrati* referred to in a Lavra document of 1097. There are corresponding tetartera [1027, 1028], the order of issue being determined by the declining quality of the alloy and the attribution to Thessalonica depending on stylistic details, in one case the curious design of the right hand with its elongated fingers and in the other the way in which the arm is held close to the body. Both are features which recur in the post-reform coinage and both contrast with the sharply projecting elbow of Alexius on Constantinopolitan coins. There was also a two-thirds miliaresion showing the emperor and St Demetrius [1029].

Several types of signed follis belong to Alexius' pre-reform period. One shows a bust of the Virgin and standing emperor [1024], another a cross on steps with IC|XC|NI|KA in the angles and an inscription in four lines invoking the Lord's protection for the emperor [1030]. Hendy assigns the first to Thessalonica, which he believes to have been responsible for almost all the 'signed' coins of the period, but the small numbers found in the Agora and Corinth excavations, two and four respectively, do not make this very plausible, and I prefer to leave it to Constantinople, although some still unidentified provincial mint is a possibility. The second coin he attributed in 1969 to an unidentified eastern mint – Antioch, which remained in Byzantine hands until 1085, is precluded by the fact that only one specimen was found in the Antioch excavations – but in *DOC 4* he favours Thessalonica. Only two specimens, however, came to light in the Agora, and one at Corinth, and the fact that

specimens are sometimes found with Arabic countermarks or are of known Asiatic provenance makes his earlier attribution to an unidentified mint in Asia Minor or northern Syria – Edessa is a possibility – more likely. A third type of ‘signed’ follis, which Hendy in 1969 assigned to Thessalonica (Type B: his Pl. 3.1) does not exist. It is a specimen of Hendy’s Class 3 of the Thessalonican reformed coinage overstruck on an Anonymous Follis of Class K which by an accident of striking has left the globule border of the latter intact on both sides.

There are in addition rare folles, some anonymous and others bearing Alexius’ name or part of it, which are now assigned to Trebizond (see pp. 228–9).

## The reformed coinage of Alexius I, 1092–1118

The main elements of Alexius’ reformed coinage have been described already, with its three concave denominations (hyperpyron, electrum trachy or trikephalon, and billon trachy) and two flat ones, a copper tetarteron and its half, the latter for a time of lead. The date of their introduction can be assigned with confidence to 1092. The hyperpyron is first mentioned in a contemporary document in March 1093, and the first coins of the new system, having on their obverse a standing Christ crowning the tiny figure of John II and on their reverse Alexius I and his wife Irene, can be dated to the autumn of 1092, when the boy was associated on the throne with his father. It is theoretically possible that this issue interrupted a reformed coinage already in existence, but Alexius’ political and financial circumstances make a date for the reform prior to 1092 unlikely, and since there is no obvious break in the main series of reformed coins that followed, it is natural to see these ‘family’ coins as marking the beginning of the reform. Their issue was in any case a very brief one. No hyperpyra are known, the coins sometimes so described being in fact electrum third hyperpyra [1031]. A few billon trachea are known, which can probably be divided into Constantinopolitan and Thessalonican issues [1032, 1034]. There are also small lead coins, which are probably half tetartera, of a very similar type, save that on the Thessalonican ones [1035] St Demetrius takes the place of Christ and the figures are full-length, while at Constantinople [1033] they are only half-length. There are no fewer than eleven specimens at Dumbarton Oaks, a surprising number, but they were presumably distributed in some quantity on the occasion of the coronation.

The main coinage of the years 1092 to 1118 is divided by Hendy between three or four mints: Constantinople, Thessalonica, a provincial mint uncertainly identified with Philippopolis (Plovdiv) but which Mme Morrisson thinks may have been Adrianople, and perhaps yet another mint. The coins attributed to Philippopolis are rare hyperpyra and billon trachea of anomalous design and fabric [1060, 1061]. Their style is indeed so different from the others that a provincial mint must be presumed, even if the attribution to Philippopolis, based mainly on the finding of a small hoard of twenty-one of the trachea in the neighbourhood in 1955, must be regarded as doubtful. Some of the tetartera seem also to be from a provincial mint of uncertain location. The division of the main coinages between

Constantinople and Thessalonica is more difficult. For the tetartera we are helped by find evidence from the Agora and Corinth, but for the higher denominations the deductions from hoard analysis and details of style and iconography are not always convincing, and any analysis is complicated by the fact that the coinage lasted for a quarter of a century, so that one has to take account of considerable stylistic evolution as well as variations resulting from production at different mints.

The main problems arise over the hyperpyra, which have been studied by Metcalf and at greater length by Hendy. The bulk of the coinage is certainly from Constantinople, and evolves over the years from a neat and elegant style [1036] to one showing the emperor's body abnormally tall and elongated, surmounted by a tiny head, and with the pearls that decorate the edge of his cloak replaced by grotesquely large globules [1037, 1038]. Hendy divides the coinage into a number of subclasses depending on the way in which the border of the chlamys joins the collar-piece, on the presence or absence of a diagonal line across the flap of the cloak hanging down from the emperor's left hand, on the number of jewels in the collar-piece, and on whether the left-hand column of the inscription ends T, T' or TH; but it is difficult to be sure how far these details mark successive issues or indeed whether they have any significance beyond differentiating particular groups of dies. More problematic is the coinage of Thessalonica. The earliest group of Thessalonican coins [1048] has quite distinctive features: small flans, no pearl border at the bottom edge of the right side of the imperial cloak, and the TΘ that begins the right column of inscription arranged vertically instead of horizontally. But the further hyperpyra attributed to Thessalonica [1049, 1050] develop in the same way (with T, T', TH, etc.) as the designs of the coins of the capital, even though differing from these in detail, e.g. in the larger globus cruciger, well away from the edge of the coin. Although there is some hoard evidence suggesting that a different mint was at work, I am not wholly convinced that this is the case.

The electrum trachea present fewer problems than the hyperpyra. There are two types, one [1039] having on the obverse a seated Virgin holding a medallion of Christ and on the reverse the emperor standing, the other [1051] having a seated Christ and the emperor crowned by the Virgin. The first, which is quite common and whose type gave the name of trikephalon to the denomination, must have been struck at Constantinople. The second is very rare, and one variety has a huge and badly designed star occupying the space between the heads of the emperor and the Virgin. Hendy suggests that the coins were struck at Thessalonica and belong to the period of the second Norman war, when for over a year (September 1105–November 1106) Alexius was either at Thessalonica or in its neighbourhood, and that the star may have been intended to represent an exceptionally brilliant comet whose forty-day duration led to much speculation on its possible significance.

There are five types of billon trachy. One [1061] is of the same crude style as the hyperpyron attributed to Philippopolis and must come from the same mint, wherever this may have been. Hendy has revised his original views on the attribution of some of the others. In 1969 he attributed three types to Constantinople and only one to Thessalonica; he now



gives two to Constantinople and the rest, including a newly discovered one, to Thessalonica. His suggested arrangement is now as follows, the 1969 classes being given in parentheses.

*Constantinople*

2 (3). Seated Christ./Bust of emp. with cross. [1040]

3 (4). Bust of Christ./Bust of emp. with labarum. [1041]

*Thessalonica*

B (Constantinople 2). Christ seated./Emp. standing. [1052]

C (Thessalonica). Christ seated./Emp. and Virgin. [1053]

D (—). Christ seated./Emp. crowned by Virgin. [1054]

The tetartera, illustrated on Pls 61–2, are of nine different types. The details require no comment, though the first appearance on coins of a bust of Christ holding an *open* Gospel Book may be noted. Hendy originally divided them into two major groups, one consisting of relatively small, thick coins of good style with boldly clipped edges which he assigned to Constantinople [1042–6], and the other of coins of larger flan and often rougher fabric which he assigned to Thessalonica [1055–7], while admitting that some of the latter, struck on lighter and thinner flans and much cruder in style, may possibly be from a mint in central Greece. This broad division into groups is confirmed by the Agora and Corinth material, in which the first group occurs only rarely and most of the second one in huge numbers. His Thessalonican Class D [1057], however, with C Φ ΑΛ Δ in the quarters of a cross, is anomalous, for although a very common coin it is rare in the excavation material and is not linked by overstriking with the other ‘Thessalonican’ coins. Since its style and fabric preclude its attribution to Constantinople it is presumably from some provincial mint outside Greece, though in the absence of positive evidence of provenance one cannot say where this may have been. Specimens of it are notably lighter than those of the other groups, averaging *c.* 3 g rather than *c.* 4 g, and it tails off into very light coins of *c.* 1 g with crude designs – the emperor’s head is large and broad, and the letters on the reverse often interchange from left to right – which are a further mark of provincial minting. With it should be associated a similar coin, known to Hendy in 1969 only from an illustration in Sabatier, having the letters ΑΛΚΦ at the ends of a cross [1058].

We have no clue to the dating or order of the Constantinopolitan series. The Thessalonican ones are frequently overstruck on each other, or on the last Anonymous issues (Classes I–K), while mules exist between Classes 2 and 3. It is not always easy to identify the undertypes with certainty, and although the order followed on the plates is mainly based on that proposed by Miss Thompson it departs from this, and from that proposed by Hendy, in a few particulars and may have to be modified in the future.

Finally, there are the half tetartera. A major group of these is formed by small lead coins having on the obverse a bust of Christ and on the reverse a bust of the emperor. Hendy, who did not know of them in 1969, treats them in *DOC* 4 as tetartera and attributes them to an uncertain mint, possibly Thessalonica. For the reasons already given, I prefer to regard them

as half tetartera, and their virtually circular shape, contrasting with the sharp bevelled edges very characteristic of Constantinopolitan tetartera, points to them being Thessalonican. The fact that there are eleven specimens at Dumbarton Oaks, all like those of 1092 from the Shaw collection, suggests that they were all found together and perhaps represent the contents of a shop-till, since small change is something that is rarely hoarded.

In addition to the lead coins, there are a few copper ones so light (c. 2 g) that they must be regarded as half tetartera also [1047]. The type corresponds to that of the second coinage of Thessalonica, so that in 1969 Hendy assigned them to this mint. The style and the details of the design are different, however, and there were apparently no specimens found at either Athens or Corinth, so they are better attributed to Constantinople. Perhaps the government originally planned to use lead for the half tetarteron, thinking that copper halves would be too small to be practical, and subsequently changed its mind on finding that the lead coins, of about the same size as the full tetartera, were too easily confused with them.

### Trapezuntine folles (Pl. 58)

This series, which presents some analogies with the semi-independent coinage of Cherson of the ninth and tenth centuries, has only recently been identified. It consists entirely of light folles, often of more or less regular geometrical shapes (e.g. square, hexagonal), apparently through having been cut out by shears from plates of metal after striking. Several of them are linked by overstrikes, and a number are known to have been found in Trebizond or its vicinity, or are preserved in the city museum. One (no. 7; possibly also no. 3) bears the name of Alexius I and two (nos 2, 13) what are presumably his initials. Others, like the Anonymous Folles, with which two of them (nos 5, 8) were formerly grouped as Classes M and L, are purely religious in theme. The curious fabric has a parallel in Crusader coins of Antioch of the first decade of the twelfth century and in some contemporary Islamic coinage from Syria of which a large hoard was found at Corinth. The coins are generally very rarely seen, since the area of eastern Anatolia in which they must mainly have circulated is not much visited by numismatists. A few specimens turned up in the Corinth and Athens excavations, three of those found at Corinth being illustrated in the volume on the coins.

The coinage presumably came into existence as a consequence of the separation of Trebizond and the theme of Chaldia from the rest of the Empire in the late eleventh century, when land communications were cut as a result of the Turkish occupation of most of northern Anatolia. The city itself was captured by the Turks after the battle of Manzikert, but it was recovered in 1075 by a local magnate named Theodore Gabras, who was given the theme of Chaldia by Alexius to govern because, as Anna Comnena frankly avows, 'after he had captured Trebizond and allotted it to himself, as if it were his special portion, he was irresistible' (*Alexiad* VIII. 9). He was indeed only one of a number of territorial magnates and military adventurers who in the disturbed state of Anatolia in the second half of the

eleventh century succeeded in setting up minor lordships for themselves. He was killed in 1098 fighting the Turks, but his son Gregory, who had married a daughter of Alexius I, was in turn given Chaldia in *c.* 1103. He was in due course deposed for recalcitrance, but a third member of the family, Constantine, managed to hold the office of duke from sometime before 1119 to after 1140, when he defeated an attempt by John Comnenus to bring him to heel. It is these long decades of semi-independence, when Trebizond could not rely on supplies of coin from the capital, that explain the existence of this meagre but interesting coinage.

The numbering of the list that follows is that of Bendall, though the order of issue is only approximate, being based mainly on considerations of size, shape and style. The evidence of overstriking shows that 10 is later than 8 and 9, and 12 than 7 and 11. There are mules between 13a and 13b.

1. Bust of Christ./Cross on leaved base in pelleted border. [1002]
2. Bust of Christ./Rayed cross with letters [A]ΛΔP (for *Α*λεξιος *Δ*εσποtes *Π*ομαion) at ends. [1003]
3. Cross with IC XC NI KA in quarters./Bust of emp. (probably named). [1004]
4. Bust of Christ./Jewelled cross with IC XC NI KA in quarters. [1005]
5. Christ seated./Jewelled cross on crescent. [1006]
6. Bust of Virgin./Letters ΦΠΧ (for Φῶς Χριστοῦ φαίνεται πᾶσι, i.e. 'The light of Christ illumines all') around cross. [1007]
7. Bust of Christ./Bust of emp. [1008]
8. Bust of Christ./Cross with IC XC NI KA at ends. [1009]
9. Patriarchal cross on steps, Xs in angles./As obverse but Es in angles. [1010]
10. Bust of St Theodore./Cross. [1011]
11. Bust of Christ./St Theodore standing. [1012]
12. Bust of Christ./Bust of St Demetrius. [1013]
- 13a. Bust of Christ./Jewelled cross, ΑΛΒΡ in quarters. [1014]
- 13b. Bust of Christ./Plain cross, ΑΛΒΡ in quarters. [1015]
14. Crude cross./Crude cross.

Possibly forming part of the same series is a coin published by Longuet having on one side a seated Christ and on the other a standing Virgin *orans*. It is overstruck on a tetarteron of Alexius I.

## John II, 1118–43

The coinage of John II bears a general resemblance to that of his father, but there are notable differences in proportion. Alexius struck only one type of hyperpyron during the twenty-five years between 1092 and 1118, no doubt because of the desirability of persuading his subjects

of the stability of the new system. John II, in a reign covering the same period of time, felt able to strike three types. At the other end of the scale John struck few tetartera, probably because the large output of Alexius' reign made further supplies of token coins less necessary. The mints are identified by Hendy as Constantinople and Thessalonica, but more may have been involved.

The Constantinopolitan hyperpyra are of three types [1064, 1065, 1066]. They all have a seated Christ on the obverse and the emperor and Virgin on the reverse, but differ in a number of details. The order of striking is determined by the fact that the type of throne shown on the first has the same two horizontal bars that occur on coins of Alexius, while the last involves coins from two separate officinae differentiated from each other by having collar-pieces of four or five jewels, a feature which recurs under Manuel. There is also, at Dumbarton Oaks, a muled coin having a Thessalonican reverse of John's Class III and a Christ Emmanuel obverse of Class I of Manuel. All three Constantinopolitan classes are common. There is nothing to indicate the precise date at which each was introduced.

Corresponding Thessalonican issues exist for the three Constantinopolitan issues. They are distinguished from the coins of the capital mainly by being thicker and of rather smaller module (*c.* 28 mm as against *c.* 31 mm) and much more deeply concave. A specimen of Class I is illustrated [1073] to show the difference. There is also in the Thessalonican series an exceptional coin (Hendy Pl. 9.12) struck with an obverse die of Class II and a mis-cut die of Class III, the die-sinker having inadvertently retained the labarum which he had been accustomed to including on his Class II design. All the Thessalonican coins are somewhat rare. The presence of a few specimens in the Gornoslav hoard, which dates from the reign of Isaac II, proves that they belong to the reign of John II and not that of John III a century later, as their different fabric had led some scholars to suspect. Coins of John III copied from those of John II's Class I, do, however, exist, and will be discussed later (pp. 247–8).

The electrum trachea (hagiogeorgata) of Constantinople form two classes. Class I [1067] has on its reverse the emperor and St George holding a patriarchal cross which ends below in a globule. Class II [1068] is the same except that the cross ends in a horizontal bar with steps beneath. The order of issue is certain, since a specimen is known which was struck by a reverse die originally intended for Class I but recut as one of Class II. The date of the change and its significance are alike unknown. It has been argued that some unusually light specimens (*c.* 2.3 g) of John II's and Manuel I's electrum trachea represent a half denomination, but it is difficult to believe that if this were intended the module would not have been altered. There also exist some rare coins, on which a labarum replaces the patriarchal cross [1074], assigned by Hendy to Thessalonica. Although they do not differ appreciably in fabric from the coins of Constantinople, their absence from a large Cypriote hoard of Manuel's reign in which the two classes from the capital are abundantly represented shows that they must come from a provincial mint.

The Constantinopolitan trachea form two classes [1069, 1070]. The first, which is rare, shows the Virgin seated and a standing figure of the emperor holding labarum and globus

cruciger, the second has a bust of Christ and one of the emperor. There are two varieties of the second, one with the shaft of the emperor's sceptre plain and the other with it intersected by a transverse bar, probably the products of different officinae. A third type [1075], rather rare, resembles the first but shows the emperor holding the labarum differently and with an akakia instead of a globus cruciger. It is apparently from Thessalonica, or at least from a mint other than Constantinople, since specimens were absent from two Cypriote hoards in which both the other types were well represented.

There are, finally, the tetartera and half tetartera. Two classes of tetartera can be assigned to Constantinople [1071, 1072], both weighing about 4 g, and a third, larger in module but similar in weight and represented in considerable numbers at Athens and Corinth, to Thessalonica [1076]. The others [1077, 1078], whose weights (*c.* 2 g) show them to be half tetartera, are moderately well represented in the same excavations and in any case too frequently so to be attributed to Constantinople. They must be either from Thessalonica or from some provincial mint in the neighbourhood.

## Manuel I, 1143–80

Manuel I's coinage reproduces many of the characteristics of that of Alexius I, though the lapse of half a century has brought about a number of changes in style and detail. The single type of hyperpyron struck by Alexius from 1092 onwards supplied the model for that of Manuel, which repeats the same contrast between normal-sized and exaggerated globules on the border of the cloak and like its prototype can be broken down into many subclasses. There is also in both reigns a great proliferation of tetarteron types. Manuel's initial obverse type in virtually all denominations, and one retained throughout the reign for the hyperpyron, was the bust of Christ Emmanuel, the Infant Jesus holding a scroll instead of a book in his left hand, the type being an allusion to the emperor's name. The earliest class in all denominations also shows the emperor beardless, although he was probably in his early twenties at his accession, and the order of issue of later classes can usually be worked out.

The hyperpyra of Constantinople and Thessalonica can be easily distinguished from each other, since the latter, in addition being much rarer and of smaller module, show the emperor holding a globus cruciger [1097] instead of a globus with a patriarchal cross. They are the last gold coins to be struck at Thessalonica in any quantity during the twelfth century. The Constantinopolitan hyperpyra [1079, 1080] are divided by Hendy into five varieties, having respectively 6, 5, 4, 3 and 8–12 jewels on the collar and differing in other respects as well. The earliest coins are broad (*c.* 33 mm), thin, and almost flat, while the latest ones are appreciably smaller (*c.* 30 mm) and have a clearly cut, jewelled style which carries over into the coinage of Andronicus. There is no very clear division into officinae, unless a square dot on Manuel's robe on some specimens of Var. III shows a second one at work.

The chronological order of the various classes of electrum trachea, which were struck in

such quantities that in the late twelfth and early thirteenth centuries the word *manuelatus* could be taken as implying this denomination, is certain only for the first two, though there is a transition from tall, thin figures on earlier coins to rather squat ones later, this feature being continued on the coins of Andronicus I. Five types can be attributed to Constantinople [1081–6]: Class I is subdivided into Varieties A, without a dot on the sceptre shaft [1081], and B, with one; Class II has Varieties A and B with four or five [1082] jewels on the collar-piece; Type C has Varieties A, B and C with no dot [1084], one dot or two dots on the shaft of the patriarchal cross, A having also a sub-variety with no stars in the field [1083]; Type D has three varieties with one, two [1085] or three dots on the sceptre shaft; and Type E has varieties with three dots [1086], with the central dot ringed, and with many dots on the collar-piece. There are Thessalonican coins, struck with smaller dies and of rougher style, corresponding in type to the first two classes of Constantinople [1098, 1099], but the third Thessalonican class [1100] reverts, perhaps deliberately, to the seated-Virgin obverse of Alexius I's electrum trachea and has St Demetrius standing beside the emperor, instead of St Theodore as on coins of Class III of the capital. These coins are called *dimitrati* in Georgian documents of the period.

The billon trachea, apart from the many later imitations, are all assigned by Hendy to Constantinople. Four types were struck [1087–92], of which the third and fourth each break down into two main groups, those of the third type being distinguished by the emperor holding a globus cruciger or a globus with a patriarchal cross, those of the fourth by the presence or absence of a large star (or two stars) in the obverse field. It may be significant that the distinctive features of the subdivisions of Class 3 correspond to those which mark the hyperpyra of Constantinople and Thessalonica, and that the presence or absence of a star corresponds to a division of the electrum trachea of Class III. This would suggest that in each case some coins should be transferred from Constantinople to Thessalonica, despite there being no obvious distinction in fabric and the hoard evidence being apparently against it. *Officina* divisions, two at the beginning of the reign and four at its end, are indicated by variations in the number of dots on the emperor's insignia or in the pattern of his loros. Briefly, though there are other elements, Class 1 has no dots (Var. A [1087]) or two dots (Var. B) on the labarum shaft; Class 2 has four dots (Var. A) or five (Var. B [1088]) on the collar-piece; Class 3 (first phase) has no dots (A [1089]), one dot (B) or two dots (C) on the labarum shaft, and Class 3 (second phase) has no dots (A), one dot (B [1090]), two (C) or three dots (D) similarly; and Class 4 has three dots on the emperor's loros between waist and collar-piece (A [1091]), or one dot similarly (B), or the same with star(s) above the throne on the obverse (C [1092]), or one dot in a circle on the loros (D). The coins, particularly those of Class 4, were issued in huge quantities, and the later ones are very irregular in weight, coins of over 4.5 g – a specimen at Dumbarton Oaks actually attains 5.85 g – being quite common. Such irregularity is normally a sign of debasement, and there does in fact seem to have been a reduction in fineness, from c. 7 per cent silver to c. 5 per cent, between Classes 2 and 3.

There are no fewer than eight types of copper coins. Four of them [1093–6], which are rare

in the Agora and Corinth excavations and can be assigned to Constantinople, require no discussion. Their order is uncertain except for one, which shows the emperor beardless [1093] and therefore started the series. The other four present problems. Each type falls into two separate groups, one consisting of well-struck coins of good style and the other of coins of the same types but of poor fabric and low weight. All occur in huge numbers at Corinth and Athens, as well as in other hoards from Greece. Hendy attributes the good series [1101–4] to Thessalonica, the bad ones [1105–8] to an unidentified mint in Greece. The Thessalonican ones divide further into two groups which are heavy (*c.* 4 g but sometimes rising to over 6 g) and two which are light (*c.* 2.5 g). Hendy regards the first as tetartera and the second as half tetartera, and in the plate descriptions I have followed his lead, although it is possible that the latter are full tetartera struck to a lower weight standard. They usually weigh more than half the units of the first series, and being of about the same module as the first group they could not have easily been distinguished from these by their users. The coins of Type A attributed to the third mint [1106] are on the other hand easily distinguishable, being struck from much smaller dies, and must therefore be half tetartera (*c.* 2 g). Those of other types are usually struck by normal-sized tetarteron dies but on thin and irregular flans, and unlike the coins of Type A they usually weigh over half the corresponding Thessalonican denomination. I am therefore inclined to regard them as full tetartera, but of some minor mint, though the possibility that some are much later in date cannot be excluded.

### Andronicus I, 1184–5

As was observed on p. 214, no coins are known that can be ascribed to Alexius II (1180–4), though the last issues of Manuel I may have continued to be struck. Presumably this suspension of the name of the reigning emperor from the coinage in part reflects the fact that a minority formally existed down to the autumn of 1183. Subsequently Andronicus, a cousin of Manuel and a person whose ability was only matched by his lack of scruple, passed from the status of regent to that of colleague, and as such would have been able to prevent the striking of coins during the remaining months of his protégé's life.

There are few coin types of the brief reign of Andronicus alone. His Constantinopolitan issues [1109–12] all have on the obverse a figure of the Virgin either seated or standing, and on the reverse his own standing figure, crowned by Christ and varying slightly in costume or insignia with the denomination. His long forked beard, which is alluded to by the chronicler Nicetas Choniates, provides an unmistakable mark of portraiture. Hendy attributes the electrum and billon trachea to two officinae, differentiated in the first case by the absence or presence of a pellet on the shaft of the labarum held by the emperor and in the second by there being two or three jewels between the emperor's loros-waist and collar-piece. This would imply a reduction in the number of officinae from the four of Manuel's reign. The

Constantinopolitan tetartera are also of two varieties, one with a long inscription (*Andronikos despotes*) and the other with a short one (*Andro-nikos*).

The only billon trachy of Thessalonica is represented by a single poorly struck specimen in Paris (*BNC* Pl. CI, B/01), having a seated Christ on the obverse and a standing figure of the emperor on the reverse. Mme Morrisson attributed it to Constantinople, but Hendy in *DOC* 4 transfers it to Thessalonica. There are two types of tetarteron, one (Type A) with a half-figure of the Virgin [1113] and the other (Type B) with that of St George [1114]. In contrast to the plentifulness of Type A, very few specimens of Type B were found in the Athens and Corinth excavations, but this may be explained by its overall rarity. Small coins of Type A [1115], regarded by Hendy as half tetartera struck at an unidentified mint in Greece, are not distinguished within the totals found at Corinth and Athens of the type as a whole, but there were forty-eight specimens in the Kastri hoard from Boeotia. They are too small to be half tetartera of Thessalonica.

The coinage of Andronicus, like that of his predecessor, was imitated in the thirteenth century. A billon trachy of the type of his hyperpyron was found in the Sardis excavations and published by Bell (no. 969) as a new coin of Andronicus. It is in fact a specimen of Hendy's Imitative Latin Class H (see p. 270). Other related coins (Latin Imitative, Classes I–M), having either a standing figure with Andronicus' characteristic beard or inscriptions recalling his name in fragmentary form, are of the same period and will be discussed in their proper place.

## Isaac II, 1185–95 and 1203–4, Isaac of Cyprus, 1184–91, and Alexius IV, 1203–4

The separation between the coins of the two Isaacs depends partly on the evidence of style but mainly on that of find spots, since there are no decisive differences in titulature. The coins attributable with certainty to Isaac II's main reign consist of what is effectively a single type of each denomination in Constantinople [1128–31], with a continuation of the preference for obverses showing the Virgin which had been evident in the preceding reign, but with St Michael playing a prominent role on the reverses of the hyperpyron and electrum trachy, and replacing the Virgin on the tetarteron of Thessalonica [1132]. The three concave denominations divide into those with three jewels on the collar (Var. A) and those with many jewels (Var. B), while there are a number of minor varieties having a star on the emperor's cloak, stars or groups of dots on the Virgin's throne, and so on. Some early Constantinopolitan hyperpyra of great rarity have the inscription arranged vertically and show the emperor with a labarum instead of a cross-sceptre, while there is no *Manus Dei* above his head. The arrangement of inscription suggests that these coins might belong to Isaac of Cyprus, but since the portrait is not that of the usurper and the style is Constantinopolitan they presumably represent the first variety of Isaac II's reign. There are tetartera [1131, 1132] and



half tetartera for both Constantinople and Thessalonica, the halves being of the same types as the units but much smaller in size. A further tetarteron [1261], originally assigned by Hendy to the Latins, has since been transferred by him to Isaac II's restoration in 1203, for the same type was continued in the name of Alexius (IV), Isaac's dies being in at least one case re-engraved in his son's name.

No hyperpyra can be ascribed to Isaac of Cyprus, but there are electrum trachea [1116] and several classes of billon trachea and tetartera [1117–25] which Hendy divides between a primary mint, presumably Nicosia, and a secondary mint, as yet unidentified. But it seems doubtful whether more than one mint would have been created in so small an island, and the diversity of style and type may well have resulted from the recruitment of several die-sinkers, varying in background and competence, by a newly formed mint. Some of the coins [1120, 1125] whose attribution to one or other Isaac was regarded by Hendy in 1969 as uncertain should go to Isaac of Cyprus also, since specimens of some have been found in the island and they are linked to the Cypriote coins by the form of the seated Christ, which with a heavy fold of clothing over his left knee, and his right leg drawn backwards and inwards at an angle, contrasts with the traditional Constantinopolitan designs and their vertical positioning. Hendy's 'Uncertain Isaac' Type B (his Pl. 21.14, from R. 2173) can be omitted, for it is no more than a specimen of his Type A on which the die-sinker accidentally reversed the positions of the Virgin and the emperor from left to right. Even with this deletion the island is left with a surprisingly large number of coin types for a short reign, but such circumstances have sometimes freed die-sinkers from the restraints of tradition and allowed them to experiment with a diversity in designs.

## Theodore Mankaphas, pretender in Philadelphia, 1188–9 and 1204–5

Theodore Mankaphas was a local notable who took advantage of Isaac's unpopularity to proclaim himself emperor at Philadelphia, his native city, in 1188. Choniates, who records his success in establishing himself in 'Lydia', informs us that he struck 'silver', the literary term normally applied to electrum and billon trachea, in his own name. In 1189 Isaac compelled him to abandon the imperial title, while apparently leaving him his governorship, but he subsequently lost this post and spent some time in prison. In 1204 he briefly re-emerged as master of Philadelphia, only to be suppressed by Theodore I of Nicaea in 1205.

A billon trachy of Theodore II of Nicaea, which came to light in the Sardis excavations, was wrongly attributed to Mankaphas by Bell as the result of a misreading of the reverse inscription (see p. 252). There do, however, exist electrum [1126] and billon [1127] trachea of the usurper. Their obverse and reverse types, the same for both denominations, are a standing figure of Christ on a dais and one of the emperor holding a patriarchal cross-sceptre and identified by an inscription in large and crudely formed letters, + Θ Δ Ε to his left and Β

to his right. Two specimens of the billon coin from Bulgaria were published in 1970 by Pochitonov, who considered an attribution to Mankaphas but rejected it in favour of one to Peter Asen (1185–95), the founder of the second Bulgarian Empire (see p. 237), who is sometimes, though rarely, called Theodore. Coins of such a kind, however, would be quite inappropriate for Bulgaria at this date, and the recent finding of a well-preserved specimen at Aphrodisias (Geyre, vilayet Aydin), only 50 km from Philadelphia, makes an attribution to Mankaphas wholly acceptable. There is a unique specimen in silver (for electrum) in the Barber Institute of Fine Arts at Birmingham.

### Alexius III, 1195–1203

Alexius III's coinage is more logically organized than that of most of his predecessors. All the concave classes [1133–6] have figures of Christ on the obverse and of the emperor and St Constantine on the reverse, the precise design differing according to the denomination. The hyperpyra have on the obverses a standing Christ, the electrum trachea a seated Christ, and the billon trachea a bust of Christ Emmanuel, while on the reverses the emperor holds a patriarchal cross, a labarum, and either a globus cruciger or a globus with a patriarchal cross. There are two varieties of each denomination, presumably following one another chronologically. The earlier coins have St Constantine's name beside his standing figure; the later ones replace this with an extension of Andronicus' own titulature, *Alexio desp. to Komneno*, instead of simply *Alexios desp.*, and reduce Constantine's name to an initial beside the saint's head. The emperor, who had attained the throne by deposing his brother Isaac, was only a Comnenus through his grandmother, a daughter of Alexius I, and his assumption of the family name, which is referred to by Choniates and confirmed by contemporary documents, was evidently intended as a public gesture associating him with the imperial tradition, as indeed was his introduction of St Constantine as a coin type. The electrum trachea always have +  $\overline{\text{K}}\text{ERO-H}\overline{\text{O}}\text{EI}$  accompanying  $\overline{\text{I}}\overline{\text{C}}\ \overline{\text{X}}\overline{\text{C}}$  on their obverses, but with the hyperpyra and billon trachea this occurs only on the later coins. The officina pattern is obscure, in part because of the poor striking of the billon trachea which usually makes it impossible to decipher their inscriptions and difficult to correlate the very varying details of the designs of individual specimens.

The tetartera of Constantinople, which are very rare, have a half-figure of the Virgin Hagiosoritissa on the obverse [1137], while those of Thessalonica have a facing bust of St George [1138]. Half tetartera of Constantinople are of the same type as the full tetartera, while those of Thessalonica have slightly varying figures of St George and the standing emperor holding either a globus cruciger [1139] or a globus with a patriarchal cross [1140]. Only on the last of these is the *Comnenus* element sometimes added to the imperial title.

A feature of the billon coinage in the last decade before the Latin conquest is the existence of what have been termed 'neatly clipped' trachea, i.e. billon coins which have had their wide

borders trimmed off so neatly that one must assume this to have been done by some official institution, presumably the mint, with the intention of reducing them to half their original weight. The trachea involved are mainly those of the last issue of Manuel I and all issues of Andronicus I [1142], Isaac II and Alexius III [1143], though occasionally earlier trachea of Manuel I [1141] and even of John II are found clipped as well. The proportion of such coins in hoards found in the provinces is never great, but one or possibly two large hoards found in the capital, presumably fresh from the mint, consisted entirely of them. Hoards containing such coins are all later than 1195, and since a few are earlier than 1204 the clipping cannot have been the work of the Latins, as suggested some years ago.

This phenomenon, though one of only marginal importance, has been the subject of some controversy, with Metcalf arguing that the clipping was carried out over a long period of years in connection with successive campaigns against the Bulgarians, and Hendy and myself believing it to be a consequence of the debasement of the billon trachy under Isaac II and Alexius III, which reduced the already meagre silver content of this coin by half and thus made it a matter of common sense for the government to clip down to the same intrinsic value such better coins of previous emperors as were still passing through its hands. Of course, this would not justify the clipping of the already debased coins of Isaac and Alexius, but the fact of their debasement may not have been generally known and the pattern of their dispersal in hoards indicates that, in any case, they were done after the others. The issue is complicated by the fact that the fineness of the clipped coins of Isaac II and Alexius III in the Istanbul hoard is twice that of clipped coins of the same emperors found elsewhere, as if it represented a particular issue of coins of superior fineness which were intended to be clipped from the first. Metcalf's arguments for relating the clipping to the Bulgarian wars seem to me to attach an exaggerated importance to variations in hoard structures which either require no explanation at all or are explicable otherwise. They also fail to take sufficient account of the total absence of clipped coins from hoards buried before 1195, which dates the phenomenon firmly to the decade before 1204.

## Bulgarian imitative coinages

Towards the end of the twelfth century there came into existence an imitative Bulgarian coinage of copper trachea which has only recently been identified. Although like the Germanic and Islamic pseudo-imperial coinages discussed in Chapters 2 and 3 it is not properly 'Byzantine', it needs to be described here since the coins involved can only be distinguished with difficulty from regular imperial issues.

The political background to this coinage was the emergence of the second Bulgarian Empire, situated in the eastern half of the Balkan Peninsula between the Maritza and the Danube. The state was founded in 1185 by the two brothers Peter and (John) Asen, who almost by accident found themselves at the head of a general rising of the very mixed

population of Bulgarians, Cumans and Vlachs who inhabited this region. By 1187, despite initial reverses, the brothers had forced Isaac II to abandon to them the area between the Danube and the Balkan Mountains, where they established Trnovo as their political and ecclesiastical capital. Subsequent campaigns allowed them to expand their power southwards into Macedonia and Thrace and from there westwards into the Struma valley. The new state may be said to have fully established itself by 1204/5 when Kalojan (1197–1207), Peter and John's younger brother, was crowned tsar with papal approval (1204) and then inadvertently saved the Nicene Empire from destruction by defeating and taking prisoner the first Latin emperor (1205), who never regained his freedom.

It was not until the reign of John Asen II (1218–41) that a Bulgarian national coinage emerged (see p. 273), though Kalojan had been formally granted the right of minting in his own name by Innocent III. But prior to John Asen II's coinage the Bulgarians had been striking imitation copper trachea, of which three series, copied from coins of Manuel I, Isaac II and Alexius III, were identified by Hendy on the basis of coin finds, mainly of Bulgarian provenance but some from northern Greece. These imitative coins already appear in hoards that can be dated before 1204, and so they cannot be Latin in origin. Equally they are absent from hoards earlier than 1195, so that they cannot be written off as contemporary provincial issues of the emperors on whose coins they are modelled. They differ from the later Latin imitations in being very close to their prototypes, but those responsible for their striking were content to ignore – probably did not even understand – how carefully the designs of the imperial coinage were at that time regulated, so that they exhibit details of pendilia or collar-piece or loros waist that do not fit into the strict imperial pattern. Inscriptions and type are carelessly rendered, the flans are often smaller than those of the originals and the striking more carelessly done, and the silver content is reduced to a trace. For isolated specimens the distinction is not always easy to make, but where hoards are involved the difference between originals and imitations is usually sufficiently well marked.

The three classes of Bulgarian imitations are as follows.

- A. Imitation of Manuel I's Class 4C (Christ seated on high throne./Emp. crowned by Virgin). [1274]
- B. Imitation of Isaac II, Var. A (Virgin seated on high throne./Emp. standing with cross and akakia). [1275]
- C. Imitation of Alexius III, Var. II (Bust of Christ Emmanuel./Emp. and St Constantine standing). [1276]

Metcalf has subsequently proposed to transfer the main 'Latin' series, from Type D of Constantinople onwards, to the Bulgarians, but his arguments for doing so fail to convince (see p. 269).

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# THE EMPIRE IN EXILE,

## 1204–1261

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### General features

The Byzantine Empire had been more than once in danger of 'foreign' conquest in the eleventh and twelfth centuries, but its enemies, whether attacking it from without like Robert Guiscard or having risen to power in its service, like the Caesar Renier of Montferrat, fully intended to maintain its power and territorial integrity and would have probably been in a position to do so. What occurred in 1204 was entirely different. First an unpopular ruler was overthrown by a native pretender with the help of a foreign army, and then he in turn was overthrown by the same army, whose leaders, since no one of them was in a position to command the others, saw no alternative to its partition between themselves. The ensuing rivalries meant that while the capital became the seat of a Latin emperor and many of the provinces were conquered and occupied, others became independent under local leaders who in many cases were related to the old imperial house. To add to the confusion, Serbs, Bulgarians and Turks seized the opportunity provided by the general anarchy to renew their encroachments on former imperial territories, at the expense of Greek and Latin alike.

The partition that eventually took shape was on lines very different from those originally envisaged by the conquerors. The Latin states comprised, broadly speaking, (1) the Latin Empire itself, consisting directly of little more than eastern Thrace, a strip of land in Asia south and east of the Sea of Marmora, and some of the islands, (2) the kingdom of Thessalonica, acquired by Boniface of Montferrat, and (3) the Frankish and Venetian principalities on the mainland of Greece and in the islands, which in part were technically subject to Thessalonica, and ultimately to the Latin emperor. The provinces that remained in Greek hands can be most conveniently described as (1) Epirus, which was seized by Michael I

(Angelus) Comnenus Ducas, a cousin of Alexius III, (2) Nicaea, where Theodore I Lascaris, a son-in-law of Alexius III, after a short delay, assumed the title of emperor, and (3) Trebizond, where Alexius Comnenus, a grandson of Andronicus I, in due course also proclaimed himself emperor. 'Nicaea', it is true, took shape rather slowly, since Theodore was only one of several aspirants to power in western Asia Minor. Further, while most of the islands in the Aegean passed under Venetian or Frankish control, that of Rhodes remained technically Greek, with Leo Gabalas assuming the titles of Caesar and 'Servant of the Emperor' as well as that of 'Lord of Rhodes and the Cyclades'.

The coinage pattern that resulted from this political upheaval is one of some complexity. The Latins were accustomed in their homelands to the use of deniers of base silver, quite unlike anything current in the former Byzantine lands, and it was not until they had been settled in the East for nearly half a century that such of the Latin states as still survived began to strike deniers on their own. From the first, however, they were prepared to mint coins of Byzantine type, partly imitative and partly not, and their issues will be examined below. The Greek states had no reason to depart from their traditional practices, save that their rulers had necessarily to abandon the custom of not striking coin before being in possession of the capital. While gold coinage was limited to the Empire of Nicaea, silver on a substantial scale was minted by Nicaea and copper very extensively by both Nicaea and Thessalonica, while the pseudo-imperial Bulgarian imitations already discussed continued to be issued. Minor coinages of Byzantine type also came into existence in Epirus and Rhodes, while Serbia, Bulgaria, Trebizond and Cyprus struck coins in the names of their several rulers that can easily be confused with those of the Empire until they developed 'national' coinages of their own. To the confusion arising out of the multiplication of minting authorities must be added that created by the limited repertoire of rulers' names – there were Theodores of Epirus, Thessalonica and Nicaea, and Johns of Thessalonica and Nicaea – and by a huge increase in the number of coin types, changed very frequently and in some cases even annually. The numismatist's problems are exacerbated by the difficulty of deciphering types and inscriptions, since all coins save the tetartera are concave in form and normally ill-struck. A number of the tetartera have no inscriptions at all, so that we cannot hope to say precisely by whom they were minted.

The coinage of this period has only in very recent years begun to yield up its secrets, and much still remains obscure. The issues of the various states and minting authorities will be described in the sections that follow, the listings of types being required because of the difficulty in identifying those of the copper and sometimes even of the silver trachea from the plates. But some general aspects must be dealt with first.

The four denominations struck in the period – five if one includes half tetartera – went back to the standard denominations of the twelfth century, but how they were by this time related to each other is unknown. No Byzantine information on the subject exists, and it is too early for Italian commercial records to be useful. There was general debasement within the system. The successors to the old electrum coins, apart from the earliest issues of

Theodore I of Nicaea, which to judge by their colour still preserve a slight trace of gold in their composition, are now of pure silver, and the coinage of billon trachea has now become one of virtually pure copper, with only their concave form remaining to show that they were valued in a different fashion from the tetartera. The minuscule copper trachea which are found in south Bulgarian hoards of the mid-thirteenth century mixed with fragments cut from coins of regular issue must have been worth much less than the latter when they were intact.

Only on the fineness of the hyperpyron, though not on its relationship to other coins, is a little information available. The Byzantine historian George Pachymeres states that John III reduced the fineness to two-thirds, a figure maintained by Theodore II. This can only be intended as an approximation, for in May 1250 the relative valuations put on Sicilian augustales ( $20\frac{1}{2}$  carats) and *perperi* included in a consignment of cash sent by Alphonse of Poitiers to Palestine shows the *perperi* to have had a fineness of  $16\frac{2}{3}$  carats, the same as that of the Sicilian taris struck by the Normans and Hohenstaufen. Contemporaries believed that the figure was not very stable, for the Florentine merchant Pegolotti, reproducing a coin list which goes back in part to the 1270s, gives various finenesses of between 16 and  $16\frac{3}{4}$  carats for hyperpyra furnished with different privy marks of which he gives drawings and which in fact occur on coins of John III, though Pegolotti in calling some of them *perperi latini* seems to think they were struck by the Latin emperors. Modern analyses, not perhaps all of them reliable, give figures varying between 18 and 16 carats. Possibly John's earliest coins revived the  $20\frac{1}{2}$  carats of twelfth-century hyperpyra – there is no positive evidence for so high a figure, but it is suggested by the fact that the emperor Frederick II adopted it for his augustale in 1231 – and subsequently, before 1250, the fineness was reduced to  $16\frac{2}{3}$  rds, as being that of the tari coinage which was well established in Mediterranean trade.

The inscriptions do not differ greatly, except perhaps in their greater illegibility, from those on twelfth-century coins. An innovation is the occasional addition of descriptive epithets to Christ or the saints, though not always to the representations with which these epithets are usually associated. If *Prodromos* ('Forerunner') is natural for a figure of St John Baptist (p. 270), it is surprising to find *Pantokrator* accompanying a standing figure instead of a bust of Christ [1279, and cf. the Slav epithet on a Bulgarian coin, p. 273], and *Hagiosoritissa* a Virgin *orans* facing instead of turning half-right [1194]. The standing figure of Christ Chalkites, a famous icon which decorated the entrance to the Great Palace at Constantinople, is identified on the coins for the first time [1150–1]. The regular imperial title is *despotes*; *basileus* or *autokrator* is rare. Family names are often used, though in a fashion confusing to the western scholar accustomed to patronymics, for Byzantine practice allowed a man to take his surname from either side of the family and the normal preference was for the more distinguished of the two. Rulers of Epirus and Thessalonica are consequently described as Comnenus Ducas instead of Angelus, while John III and Theodore II of Nicaea called themselves Ducas and Lascaris respectively instead of Vatatzes. The number of rulers using the surname Ducas, that of one of the greatest families of the eleventh

and twelfth centuries, has indeed been a source of confusion to scholars in the past, for without having ever given rise to a major imperial dynasty it had intermarried with them all.

Many of the coin types are copied from those of the twelfth century, in some cases reproducing even their odder features, such as the greatly exaggerated pearl border of the imperial chlamys affected by Alexius I [e.g. 1184]. Imperial figures are generally full-length or half-length – busts are out of fashion – and emperors are usually accompanied by some heavenly personage. They are sometimes shown enthroned [e.g. 1219], for the first time for many centuries, and either the emperor or St Demetrius is sometimes shown seated with a sword on his knees [1218]. The influence in both cases is western, for seated figures, either of a secular ruler or of a local saint, are common on German and north Italian coin types of this period, and seated figures with swords sometimes occur. Portraiture, as in the twelfth century, is virtually non-existent. The coins of John III of Nicaea show how little importance was attached to it, since his hyperpyra, copied from those of John II, show him with a round beard, while the remainder of his coinage, probably with greater accuracy, shows him with a forked one. As in the twelfth century it was not customary for emperors to co-opt their successors during their lifetimes, so we do not find coins showing several rulers. The only exception is a remarkable copper trachy of John III showing him conferring the dignity of *despotes* on Michael II of Epirus. Imperial insignia are for the most part unchanged, though the *akakia* is often excessively large [e.g. 1230–1], but rulers are for the first time sometimes shown holding a palm, a symbol still unexplained in such a context.

The religious aspect of the coins mainly involves traditional themes: Christ or the Virgin standing or seated, the emperor being crowned by a *Manus Dei* or by the Virgin, the emperor and some saint holding a cross or standard or other object. There are changes in the proportions in which specific figures occur. St Demetrius now completely dominates the coinage of Thessalonica. St Theodore is much more frequently present than heretofore, as is St Michael, while St George plays a less conspicuous role. There are also novelties. The use of Christ Chalkites has been alluded to already. SS Constantine and Helena make their first appearance [1264, 1266]. St Peter with his keys, and SS Peter and Paul embracing each other, are shown on copper trachea of the Latin Empire [1259, 1260], and St Peter, more surprisingly, on a coin of Thessalonica [1239]. Coins of the Empire of Nicaea frequently show St Tryphon, a local third-century martyr, either alone or accompanied by his symbol, a conspicuous fleur-de-lis, since his relics annually performed the miracle of causing a lily to blossom out of season on his feast day (1 February). A model of Thessalonica, either held jointly by St Demetrius and the emperor or being offered to the latter by the saint, is sometimes shown on this city's coins [e.g. 1199, 1210]. On one coin it is carefully identified: ΠΟΛΙΣ ΘΕΣΣΑΛΟΝΙΚΗ.

The strangest of all innovations was to be the use at Thessalonica, in the 1230s and 1240s, of types involving winged figures or objects, and even detached wings, which were utterly strange to the whole tradition of Byzantine coinage. They include an eagle, a single eagle's wing occupying the field [1227], the head of a winged cherub [1176], a cross and haloed cross



between wings, a winged emperor [1228], a wing attached to an arm holding a sword [1229], a winged head above a wall, and detached wings apparently used as privy marks [1230, 1231]. They seem, like the seated-ruler type, to be German in inspiration, for similar figures occur quite extensively on the coinage of some parts of Germany, notably in Silesia and Brandenburg in the north and in Bavaria, nearer the Byzantine frontier, in the south. Their significance, or why they came to be used, have not been satisfactorily explained, nor the fact that they seem to be limited to the coinage, without affecting other forms of Byzantine art. Representations of a winged emperor were to play a prominent role in early Palaeologid coinage.

Another noteworthy feature of the coinage of the period is the extensive use, in certain series, of privy marks. They usually take the form of pellets, crescents, crosses, saltires or letters placed in the field or in some conspicuous position in the design, such as the panels of the throne of a seated figure. They are virtually limited to coins of gold and silver, though they do not occur on all of these, and for reasons of symmetry they are often paired. A few, such as those used under Theodore II of Nicaea, can be interpreted with certainty as meaning regnal years, for the four marks A, B, Γ and Δ correspond to the four years, 1254–8, of his reign. Others, notably those on the hyperpyra of John III, are too numerous to permit of such an explanation, and for the same reason they cannot be mint or officina marks. They are probably moneyers' marks, like those that occur on the contemporary silver grossi of Venice, where their use is fortunately explained by surviving mint records. They were introduced there under Jacopo Tiepolo (1229–49), only just after their first occurrence at Nicaea. At first they involved no more than a pellet or other sign placed in some particular position in the field, but in 1353 the *massari* (i.e. *magistri*) in the mint were instructed to use the initial of their given name and much later (1421) that of their family name as well. Since these senior officials took it in turn to be responsible for the output of the mint for a few weeks or months at a time, a number of marks can occur even in quite short reigns. Pegolotti associates the use of some of them at Byzantium with particular coin finenesses, but this would be no more than a consequence of such coins being struck while particular moneyers were in office. It does not imply that the marks were intended to identify particular finenesses in the way that privy marks were sometimes used in the West.

Since no mint-marks are used, there is often difficulty in distinguishing between the products of different mints when the coins are anonymous or their inscriptions hard to decipher, or when one ruler could have issued coins at several mints, as John III and Theodore II could at both Magnesia and Thessalonica. In such cases one has largely to rely upon style, though thematic content and hoard evidence may be helpful. The figures of St Demetrius or St Tryphon provide a strong presumption in favour of Thessalonica or Nicaea/Magnesia respectively. A hoard from Arta in Epirus will tend to contain Thessalonican rather than Magnesian issues of John III and Michael VIII, while Magnesian issues will outweigh Thessalonican ones amongst excavation coins from Sardis. Particular letter forms or ligatures may be preferred at one mint rather than another. But while the mints of

many coins can be identified with some confidence, there remains for a number of others an element of uncertainty.

Genealogical tables of the two major dynasties, those of Epirus-Thessalonica and Nicaea, are given in the relevant sections (pp. 245, 246), but a preliminary table of rulers may be helpful. A few of the dates have been revised in recent years (e.g. that of Theodore Comnenus Ducas' capture of Thessalonica, formerly attributed to 1222), and those for Epirus are still uncertain. Coins are known only for rulers whose names are printed in capitals.

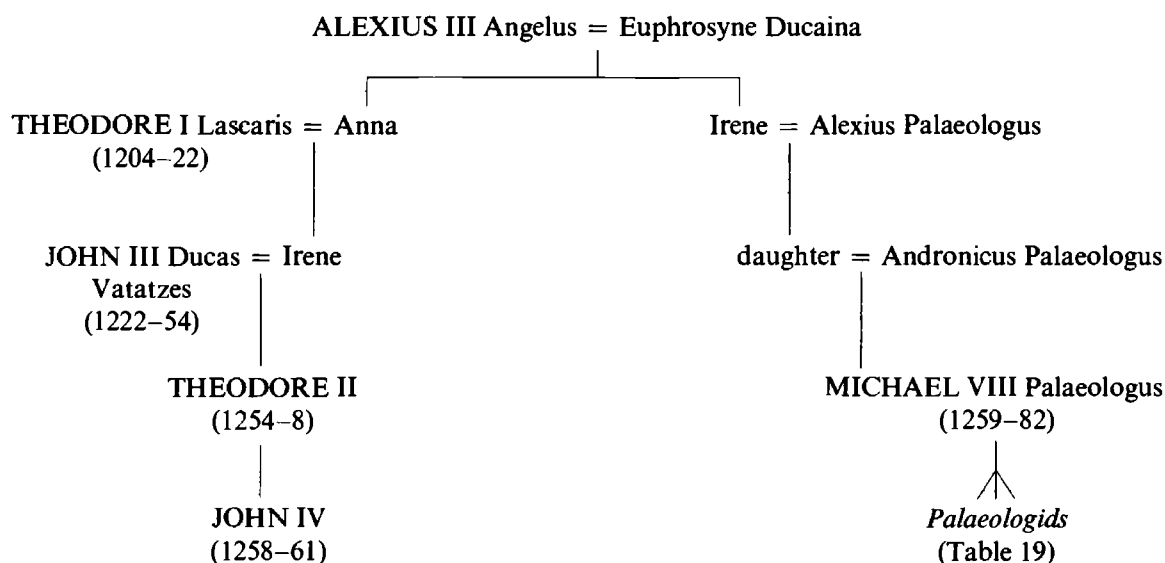
Table 16 Rulers of Epirus, Thessalonica and Nicaea, 1204–82

Epirus	Thessalonica	Nicaea
MICHAEL I Comnenus Ducas (1204–1212/13)	Boniface (1204–7) Demetrius (1207–24)	THEODORE I Lascaris (1204–22)
THEODORE Comnenus Ducas (1212/13–1230)	THEODORE Comnenus Ducas (1224–30)	
MANUEL Comnenus Ducas (1230–1)	MANUEL Comnenus Ducas (1230–7)	
MICHAEL II Comnenus Ducas (1231–68)	JOHN Comnenus Ducas (1237–44) Demetrius Comnenus Ducas (1244–6)	
	JOHN III Ducas Vatatzes (1246–54)	JOHN III Ducas Vatatzes (1222–54)
Nicephorus Comnenus Ducas (1268–c. 1289)	THEODORE II Ducas Lascaris (1254–8) John IV Lascaris (1258–9) MICHAEL VIII Palaeologus (1259–82; from 1261 at Constantinople)	

## The Empire of Nicaea, 1204–61

The most important of the successor states to Byzantium was the so-called Empire of Nicaea, created by Theodore I Lascaris. As son-in-law of Alexius III (see Table 15) he already had the rank of *despotes* in 1204. He had left the capital even before the fall of the city, and immediately after the catastrophe began to rally his compatriots in north-western Asia Minor to resist further Frankish conquests. He was only one amongst several who followed the same course, Theodore Mankaphas again seizing power in Philadelphia (see p. 235) and Manuel Mavrozomes establishing himself in the Meander valley. Theodore's new state almost perished at birth, for early in 1205 he sustained a shattering defeat at the hands of the

Table 17 The Lascarids of Nicaea



emperor Baldwin, but the Franks had to abandon the campaign in order to deal with a Bulgarian attack and the respite allowed Theodore to consolidate his position. At first he appears to have professed to be ruling on behalf of Alexius III, who had taken refuge at Thessalonica, but in 1205 he was proclaimed emperor and in 1208 was formally crowned *basileus*. In 1210 his defeat and capture of his father-in-law, who had attacked him with Turkish support and whom he subsequently kept in prison until his death, left his authority unchallenged. In successive campaigns he disposed of Mankaphas and Mavrozomes, extending his power as far south as Miletus. It was indeed in western Asia Minor, in the rich valleys of the Hermus (Gediz-Chai) and the Meander, and not in the relatively exposed region of Nicaea in the north, that the strength of the Empire lay.

Theodore's family name was Lascaris, but he must have had a Comnenus in his ancestry, for in his documents he usually signs himself Comnenus Lascaris. He died in 1222, leaving, like Alexius III, only daughters, and was succeeded by his son-in-law John III Ducas Vatatzes. John appears to have been the son of one Basil Vatatzes, of relatively undistinguished descent, but his mother belonged to the Angelid family and thus justified the surnames of Ducas or Comnenus Ducas which he always used. He was a ruler of outstanding ability, and he very nearly recaptured Constantinople in 1236. His greatest success was his conquest of Thessalonica in 1246, which firmly established Nicene power in Europe and prepared the way for the recovery of Constantinople.

This achievement, however, fell neither to him nor to his descendants, but to a usurper less than a decade after his death. John died of an attack of epilepsy in 1254, and his only son Theodore II followed him, from the same complaint, four years later. Theodore's son John IV (1258–61) was a boy barely seven years of age, and in the struggle over the regency that

ensued one Michael Palaeologus emerged the victor. Michael was a member of a family whose political eminence dated from the marriage of his ancestor George Palaeologus to Anna Ducaïna, sister of the empress Irene, wife of Alexius I. Subsequent marriages in the course of the twelfth century consolidated the position of his house and allowed Michael to assume the style of Ducas Angelus Comnenus Palaeologus, though he came in time to dispense with all of these except the last. He had himself proclaimed emperor on 1 January 1259 and was crowned shortly afterwards at Nicaea. The unhappy John IV was gradually excluded from power, denied the use of the imperial insignia, and ultimately, after the capture of Constantinople, deposed and blinded. He died a prisoner in Bithynia sometime after 1284.

Coins are known of all the Nicene emperors save John IV, whose tenure of office was never more than nominal, but they were for the most part not minted at Nicaea itself. Hendy has pointed out that this city, while remaining the nominal capital and the seat of the patriarch, took second place for all practical purposes to Magnesia, where the treasury was kept and which was only a few miles from Nymphaeum, the favourite country residence of the emperors. The bulk of the coinage is therefore now ascribed to Magnesia, but Theodore I's coins are of two different styles, and the history of his reign suggests that he must have initially minted at Nicaea, perhaps even before his coronation.

#### THEODORE I COMNENUS LASCARIS, 1204–22

No gold coins of Theodore I are known. One tentatively ascribed to him by Hendy in 1969 (Pl. 30.1) is, Hendy now believes, a forgery of one of Alexius I.

His 'electrum' (silver) trachea, apart perhaps from Type I, are all of the mint of Magnesia, but a few of his 'billon' (copper) ones are of Nicaea. No tetartera are known.

#### *Electrum or silver trachea (Magnesia)*

Most of these appear to be silver, and have been published as such. In others there seems to be a small proportion of gold, though no analyses are available. Four types are known, two of which have come to light since 1969. Another, conjecturally attributed to Theodore by Hendy in 1969 (Pl. 51.5), has been shown by a better specimen to belong to John III.

- I. St Theodore and Virgin standing./Emp. crowned by Christ.
- II. Christ seated./Emp. and St Theodore standing. [1144]
- IIIa. Bust of Christ Emmanuel./Emp. and St Theodore holding patriarchal cross on steps. [1145]
- IIIb. Christ standing./Same as last.

Type I may be an accession issue, as its reverse type suggests, and struck at Nicaea. The emperor is shown with a rounded beard, instead of his usual forked one. The few known

specimens apparently all come from a hoard otherwise consisting almost entirely of Type II (c. 250 specimens) but with three of Variety I of Alexius III. Types II and III are otherwise known from a hoard found at Torbali (between Smyrna and Aydin) before 1946, perhaps before 1936, published by Bellinger. Six specimens of Type II were published by Bertelè in 1936. A few specimens of Type IIIa have B or Δ (dates ?), instead of the usual pellets, in the nimbus of Christ. Type IIIb is known only from a fragmentary specimen in the Istanbul Museum.

*Billon (copper) trachea*

*Nicaea.* Two types are known, the order of issue being shown by overstriking and by the wide dispersion of the first type in Bulgarian hoards. It is also copied by Type G of the Latin small module imitations attributed to Corinth. The second type derives from Manuel's Class 4c.

Coins of Class 2 made up nearly half the contents of the so-called Istanbul Hoard (B), of unknown provenance, published by Bellinger, who first made the attribution to Theodore I, as against Theodore Comnenus Ducas of Thessalonica (so Sabatier and Wroth). The fact that the hoard contained only one specimen (and two imitations) of Class 1, however, shows that the other half must have been put together in the Balkans.

1. Virgin seated./Emp. and St Theodore holding patriarchal cross. [1146]
2. Christ seated, star above cushion./Emp. standing. [1147]

*Magnesia.* The Magnesian issues are in general larger and better struck than those of Nicaea. Their attribution to Magnesia is supported by the fact that specimens of A, B and C were found in the Sardis excavations. The order of issue is uncertain.

- A. Christ standing between two crosses./Emp. and St Theodore standing. [1148]
- B. As Type II of the electrum series. [1149]
- C. Bust of Christ./Emp. and saint standing.
- D. Bust of Christ Emmanuel./Emp. standing.
- E. St Theodore standing./Emp. standing.

JOHN III DUCAS VATATZES, 1222–54 (IN THESSALONICA, 1246–54)

John III's coinage is in its bulk and variety the most important of the period. He minted throughout his reign in Magnesia, and from 1246 onwards in Thessalonica, but the two coinages were distinct from each other and can be dealt with separately (see p. 265). At Magnesia he struck the full range of gold hyperpyra, silver and copper trachea, and copper tetartera. His coins normally bear his name with title *despotes* and sometimes the surname

Ducas, but never Vatatzes. On his main coinage of hyperpyra he uses the style of *porphyrogenitus*, to which he had no claim but which resulted from the fact that the type and inscription were copied from coins of John II.

John III was the first emperor of Nicaea to strike in gold. There is at first sight a surprising contrast between the uniformity of his hyperpyra, of which there are only two types, and the diversity of his silver and copper trachea, of which fifteen and twenty-three types respectively are known and more are likely to turn up in the future. The difference is in fact superficial, for the hyperpyra exhibit the profusion of privy marks already mentioned, and John's retention of a single type – Class I is a relatively rare and short-lived issue – was presumably intended to secure the international acceptability of his gold coins, something not required for silver or copper. But the function of the privy marks, as remarked already, appears to have been different from that of the type changes in the silver and copper trachea.

The separation of the hyperpyra of John III from those of John II has traditionally been something of a problem, since John III's Types I and II reproduced Types I and II of his twelfth-century namesake. Wroth in his main British Museum catalogue attributed to John II the coins now given to John III, but in his supplement of 1911, convinced by the evidence of a large hoard found in western Asia Minor in the late 1830s in which they had been found mixed with coins of Theodore II and Michael VIII of virtually identical fabric, he transferred nearly all of them to John III. The later coins are in fact markedly different in style and general appearance from the Constantinopolitan issues of John II, their smaller module, thicker flans and cruder style contrasting with the broad, thin and elegant Constantinopolitan coins of the mid-twelfth century. They are also frequently characterized by the privy marks just mentioned, similar marks being absent from the earlier series. But they are not so different from the Thessalonican issues of John II, and in 1960 Metcalf proposed on stylistic grounds to transfer to John III a selection of further types of hyperpyra which he felt to be thirteenth century in date. This extension of John III's currency was, as he indeed admitted, unsupported by hoard evidence and was finally disposed of by Hendy, who showed that the coins in question fitted well into the pattern of provincial issues of the earlier period. The distinction between the coins of the two emperors now seems assured.

The types of John III's other coins require no particular notice. The derivative element is very pronounced. In addition to the hyperpyron types borrowed from John II, one notices the exaggerated pearl edgings of the imperial chlamys on designs inspired by coins of Alexius I, and the crudely infantile face of Christ Emmanuel going back to those of Manuel I. The difference between the imperial portraiture on the gold, and that on the silver and copper, has already been remarked. Saints are usually identified by name, and only where no legible specimen is available are we left in doubt as to who is intended.

### *Hyperpyra*

- I. Christ seated./Half-length figures of emp. and Virgin holding patriarchal cross (based on John II, Class I). [1157]
- II. Christ seated./Emp. crowned by Virgin (based on John II, Class II). [1158]

John III's two classes of hyperpyra are basically the same thematically, but Class I has KERO HΘCI around the bust of Christ and lacks the *porphyrogenitus* which makes part of John's title on Class II. Coins of Class I are relatively rare, and their issue was presumably of short duration. Mules and transitional varieties between the two classes are known.

Coins of Class I are usually without privy mark, though specimens with three pellets to the right above Christ's throne, or a star to the left and the right, are recorded. On coins of Class II such symbols proliferate, though those with no mark at all still predominate. Where marks are present they are normally placed above the throne, to left or right, or both – pellets or groups of pellets, crosses, saltires, stars, crescents [1158], letters (K, O, Θ, M, Π, Ψ) – but there is sometimes a + or an O on the Gospel Book that may have the same meaning. The signs to left and right are not always identical: thus one finds a pellet and a star, or KΘ, or ΔP. A number of such signs from hoard material were noted by Metcalf in the article just referred to, and Hendy has compiled a list of over forty varieties, largely from hoard material in the Archaeological Museum at Istanbul. There is no reason to suppose that the list is complete. As noted above, they are probably moneyers' marks, and how they are to be arranged chronologically still escapes us. Coins with larger flans, taller and more elongated figures, less standardized loros patterns, and neater inscriptions are presumably the earliest in date, since they are closer to their Comnenian prototypes.

### *Silver trachea*

The silver trachea, despite the number of types, are individually rare, and of some no more than a single specimen is known. A few have privy marks identical with those on the gold, but most are without them. Annual type-change is a possibility. There is at present no way of ascertaining the order of issue, though coins having very large flans (e.g. A, C, F) are probably the earliest in date. Hendy notes that Type I is linked to Type G of the copper trachy by the unusual decoration of the Virgin's throne. The following list reproduces the order and lettering of *DOC 4*, Types J–O being additions to Hendy's list of 1969.

- A. Christ seated./Emp. and St Constantine. [1159]
- B. Virgin seated./Emp. and Christ Chalkites (so designated). [1160]
- C. Christ seated./Emp. and St Theodore.
- D. Bust of Christ Emmanuel./Emp. and St Theodore. [1161]
- E. Virgin seated, ΔP on throne./Emp. and St Constantine. [1162]
- F. Bust of Christ Emmanuel./Emp. standing, holding gl. cr., *Manus Dei* to r.
- G. Bust of Christ Emmanuel./Emp. standing, holding akakia. [1163]
- H. St Michael standing./Emp. standing. [1164]
- I. Virgin seated./Emp. and Christ standing. [1165]
- J. Christ standing between two stars./Emp. and St Theodore holding patriarchal cross.
- K. Christ seated./Emp. and St Constantine.
- L. Christ seated./Emp. standing.

- M. Bust of Christ Emmanuel between two crosses./Emp. standing. [1166]
- N. Virgin seated./Emp. standing.
- O. Christ seated./Emp. standing.

### *Copper trachea*

The details of John's numerous types of copper trachea are often hard to make out because of poor striking, and are for the most part variants of well-established themes. The order of issue is unknown. The following list is that of *DOC4*, Types A–L being taken over unchanged from Hendy's list of 1969. I would myself attribute Type K, and perhaps Type Q, to Thessalonica. St Demetrius is more appropriate to the latter mint, as is the seated emperor of Type Q. Fabric and style are not decisive either way, but Hendy considers some of the details (e.g. the design of the emperor's throne in K) to be Magnesian rather than Thessalonican.

- A. St Michael standing./Emp. crowned by Christ.
- B. St George standing./Emp. crowned by Christ.
- C. Virgin standing between two crosses./Emp. crowned by Christ. [1167]
- D. Christ standing between two crosses./Emp. and Virgin holding patriarchal cross. [1168]
- E. Bust of Christ Emmanuel./Emp. and St Constantine. [1169]
- F. Christ seated./Emp. standing. [1170]
- G. Virgin seated, ΔP on throne./Emp. standing. [1171]
- H. Christ Chalkites (so denominated) standing./Emp. standing.
- I. Virgin seated./Emp. standing. [1172]
- J. Bust of Christ./Half-length figure of emp. [1173]
- K. St Demetrius standing./Emp. seated. [1174]
- L. Half-figure of the Virgin./Half-figures of emp. and Virgin.
- M. Christ standing./Christ and emp. standing.
- N. Virgin standing./Emp. and St Theodore standing.
- O. Half-length figure of St George./Half-length figure of emp.
- P. Half-length figure of St Theodore./Emp. standing.
- Q. Half-length figure of St Demetrius./Emp. standing, *Manus Dei* to r.
- R. Bust of Christ./Emp. standing.
- S. Bust of Christ./Emp. standing, *Manus Dei* to r.
- T. St George standing./Emp. standing.

### *Tetartera*

The number of John III's known tetarteron types is much smaller than that of his silver and copper trachea, but some of those classified as uncertain (see p. 254) are probably his.



Without an inscription we have no way of telling. One, indeed, has been transferred from this category on the evidence of a more legible specimen than was available to Hendy in 1969 (Class G). The order of issue is unknown.

- A. Trellis pattern of interlaced bands./Emp. standing. [1175]
- B. Head of winged cherub./Emp. standing. [1176]
- C. Bust of St George./Emp. standing. [1177]
- D. Cross in jewelled crescent./Half-length figure of emp. [1178]
- E. Bust of Christ Emmanuel./Emp. standing. [1179]
- F. Virgin standing between two stars./Emp. standing.
- G. Patriarchal cross on steps./Half-length figure of emp.

### *Half tetartera*

This denomination was not normally struck at Magnesia, any more than it had previously been at Constantinople, but some at least of the tetarteron types, struck on very light flans and with dies much smaller than usual, can only be construed as such [1180]. It is indeed possible that all very light specimens, even if struck with normal dies, are half tetartera, since Byzantine mint tradition was very casual over the use of the correct dies for fractional coins.

### THEODORE II DUCAS LASCARIS, 1254–8

Theodore II's coins, which have sometimes been confused with those of Theodore I, were struck at Magnesia in Asia Minor and at Thessalonica in Europe. The single issue of the second mint is described on p. 267. His Magnesian issues are remarkable in that both the hyperpyra and the silver trachea are dated by regnal years, the letters A, B, Γ or Δ appearing conspicuously on the obverses. On the silver a lis is substituted for the letter B, probably an allusion to the fact that February, the second month of the year, opens with the feast of St Tryphon, whom the lis commemorated. The emperor uses the names Ducas and Lascaris and the style of *porphyrogenitus*, much abbreviated and quite unsystematically, the die-sinkers placing on the dies as much of them, or of any two of them, as they thought fit or could find room for.

### *Hyperpyra*

The sole type has on the obverse a seated Christ and on the reverse the emperor crowned by Christ [1181, 1182]. The date letter, often duplicated or reversed, is placed above the low throne on the obverse. Hendy published specimens with all four letters in 1969 (Pl. 34.9–14), but at that time hesitated over accepting the letters as dates (p. 260).

*Silver trachea*

These are likewise dated, but the types were changed annually. The discovery of the specimen with delta makes it possible to replace Hendy's alphabetical references (given in parentheses) with numerical ones corresponding to the order of striking.

- I(B). Christ standing between two alphas./Emp. and St Theodore standing with patriarchal cross. [1183]
- II(C). St Tryphon standing between two lis./Emp. standing. [1184]
- III(A). Christ seated between two gammas./Emp. and St Tryphon standing. [1185]
- IV(-). Virgin seated, two deltas on throne./Emp. seated. [1186]

*Copper trachea*

Four types, presumably representing annual issues, are known. Hendy's Type D of 1969, on which the emperor's name was not legible, is a coin of John III (Class T), but a new type was published in 1974. The order of issue is uncertain, but Type A, with Bs in the field, was presumably struck in Theodore's second year (1255/6). The first recorded specimen of it, from the Sardis excavations (no. 964), was wrongly attributed by Bell to Theodore Mankaphas, the letters OAA|CK having been misread as MA|NK and conjecturally completed by AΦ|AC instead of AP|IC.

- A. Christ standing between two betas./Emp. crowned by Virgin. [1187]
- B. As Type II of the silver. [1188]
- C. St Tryphon standing./Emp. standing. [1189]
- D. Bust of Christ Emmanuel./Emp. and St Tryphon standing. [1190]

*Tetartera*

Both types bear the emperor's name.

- A. Lis./Emp. standing. [1191]
- B. Star in crescent./Emp. standing. [1192]

## JOHN IV DUCAS LASCARIS, 1258-61

No coins bearing John IV's name are known, and the political tension of the last months of 1258, followed by the usurpation of Michael VIII in January 1259, make it unlikely that any were struck. There were none in the Arta hoard, which dates from very early in Michael VIII's reign. Hendy has noted (p. 261) that a flat copper coin and a billon trachy attributed by Whitting and Donald to John IV are really of Michael Shishman and Ivan Stephen of Bulgaria and of John III (Class E) respectively.

MICHAEL VIII PALAEOLOGUS (BEFORE THE RECOVERY OF CONSTANTINOPLE),  
1259–61

A few coins can be attributed with reasonable certainty to this period, mainly because of their close resemblance in style to those of Theodore II (Hendy 263–4). The double B and Γ on Classes B and C of the silver trachea, continuing the system under Theodore II, dates them to 1260 and 1261 respectively. The coins are as follows.

*Hyperpyron*

Christ seated./Emp. crowned by Virgin. [1286]

*Silver trachy*

- A. St Michael standing./Emp. and St George holding labarum. [1299]
- B. Virgin seated, B B on throne./Emp. embraced by St Michael.
- C. Christ standing between Γ and Γ./Emp. crowned by *Manus Dei*. [1300]

*Copper trachy*

- A. St Tryphon standing between two lis./Emp. crowned by Virgin. [1338]
- B. Christ seated./Emp. standing.

*Tetarteron*

Christ standing./Emp. standing.

UNCERTAIN NICENE ISSUES

A number of Nicene tetartera have no imperial inscriptions, and cannot be attributed with confidence to any particular emperor. Coins of the same type may vary considerably in size and weight, but it is hard to say whether there is any difference in denomination. The list that follows is that of *DOC* 4. Types A–E correspond to those in Hendy 264–5, save that the original Type B has now been transferred to John III (tetarteron Type G) and a new one, unknown to him in 1969, has replaced it. There are also two trachea with Christ Chalkites which cannot be assigned to particular emperors.

*Silver trachy*

Christ Chalkites standing./Virgin standing, half-right, *orans*. [1150]

*Copper trachy*

Christ Chalkites standing./St George standing. [1151]

*Tetartera*

- A. Jewelled B (inverted) between two groups of three pellets./Emp. seated. [1152]
- B. Interlaced jewelled pattern./Emp. standing.
- C. Patriarchal cross on base, I C X C N K in angles./Christ Chalkites standing. [1153]
- D. Jewelled cross with lunate ends./Half-length figure of Virgin *orans*. [1154]
- E. Jewelled cross with I C X C in angles./Two jewelled Bs back to back. [1155]
- F. Floral pattern./Two jewelled Bs back to back.
- G. Cross on leaved base./Half-length figure of St Theodore. [1156]

## The Lordship of Rhodes, 1204–49

The meagre coinage of Rhodes under the Gabalas brothers is a necessary appendage to that of the Empire of Nicaea. It consists of small flat copper coins, presumably intended as tetartera and having a purely local circulation. They can be compared with the earlier coinage of Trebizond (see pp. 228–9), but bear their issuer's name.

Rhodes was ruled in succession between 1204 and 1249 by two brothers, Leo and John Gabalas, members of the Cretan aristocracy. Leo (1204–40) was apparently governor of Rhodes before 1204, and simply remained in power with the title of Caesar. The southwards expansion of Nicaea placed his position in jeopardy, and after John III had attacked him in 1233 he concluded a treaty of friendship with Venice, placing himself under the protection of the Republic (1234). Subsequently he came to terms with the emperor, whose fleet he commanded in an unsuccessful attack on Constantinople in 1238. The treaty with Venice terms him 'Caesar' and 'Lord of Rhodes and the Cyclades' (*dominus Rhode et Cicladum insularum Kserrus Leo Gavala*), and on his coins he styles himself 'Caesar' and 'Servant of the Emperor'.

Leo died soon afterwards (c. 1240) and was succeeded by his brother John, but with the new title of αὐθέντης, perhaps best translated as 'regent'. His rule lasted to 1249, when the defences of the island were breached by the Genoese in a surprise attack while John was campaigning at the emperor's side in Bithynia. John III recovered the island after a brief campaign, and apparently this time annexed it, for we do not hear of John Gabalas again.

The regular coins, of which a number of specimens are known, bear inscriptions on both sides in several lines which most commonly run as follows:

KAIC|CAPOΓA|BAΛAC (Καῖσαρ ὁ Γαβαλάς) and OΛOYΛ|TOYBA|CIAEC (ὁ δοῦλος τοῦ βασιλέως) [1284]

+IΩ+|OΓABA|AAC and OAYΘEN|THCTHC|POΔOY [1285]

Schlumberger has also published very rare coins that belong to one or other Gabalas, it is impossible to say which:

1. Monogram of ΓΑ./Cross.
2. ΓΑ (in monogram) | B | // | Ψ in quarters of cross./Obscure.

Between 1249 and 1307, when the Knights of St John began the conquest of the island, achieved three years later, Rhodes was administered by a succession of imperial governors of whom little is known. Lambros and Schlumberger attributed to this period a relatively common series of thin flat copper coins, usually with sheared edges making them hexagonal or octagonal in shape, having for types a large B in the field, some arrangement of crosses and Bs, a Palaeologid monogram, or some other simple design. A group of them is illustrated on Pl. 87, nos 1393–7. They do not require any specific description.

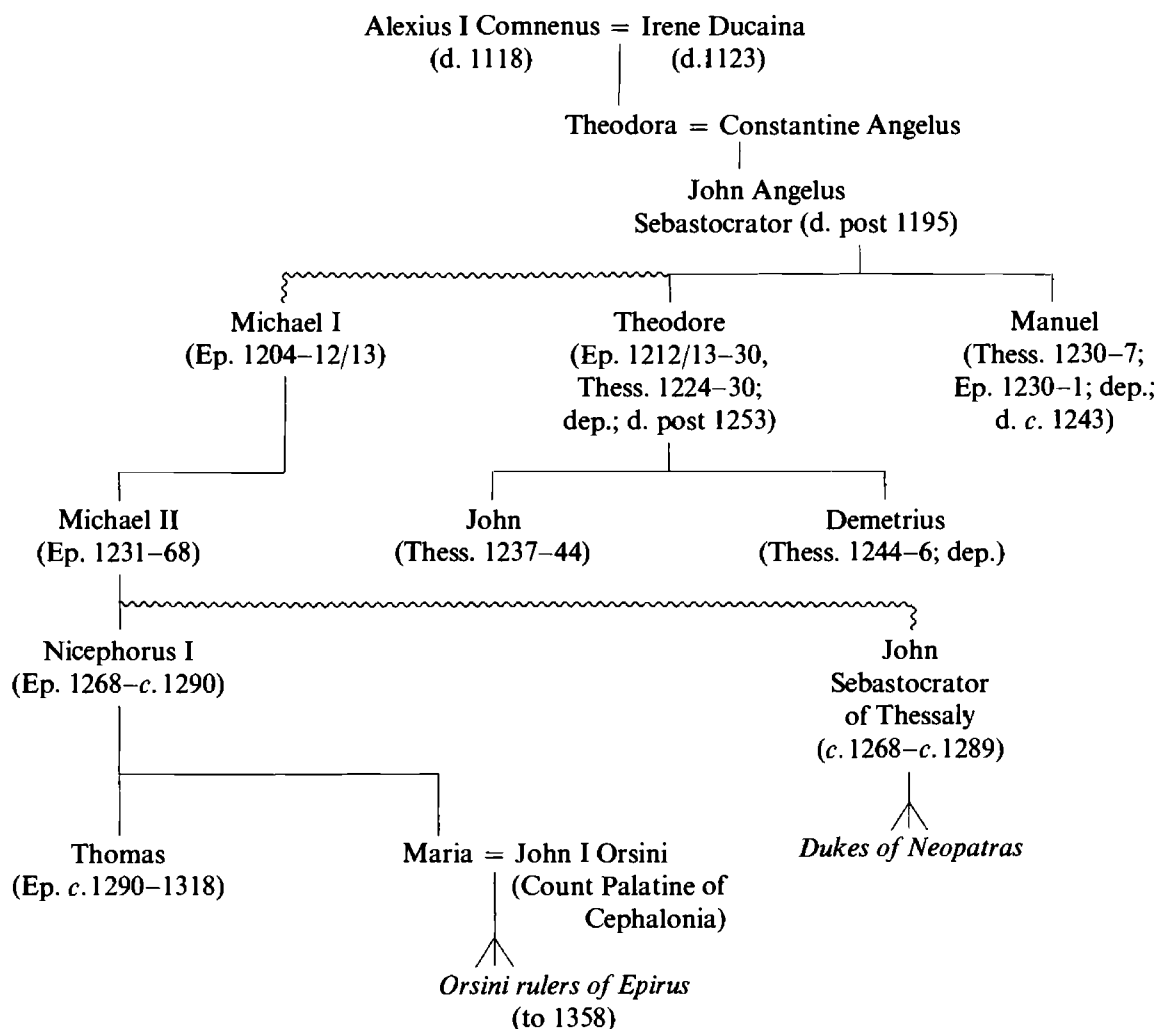
## The Despotate of Epirus

The Empire of Nicaea in Asia Minor had as its counterpart the Despotate of Epirus in Europe. The rulers of each had at different times a reasonable hope of recovering Constantinople, and the Nicene elimination of rival successor states in western Asia Minor in the first and second decades of the century was set off in 1224 by the Epirote acquisition of Thessalonica. But the union of Epirus and Thessalonica was short-lived, and after Thessalonica was annexed by Nicaea in 1246 Epirus, while remaining securely independent in its mountains, ceased to be politically of any consequence.

The founder of what was later to be termed the Despotate of Epirus was Michael I Comnenus Ducas, an illegitimate son of the Sebastocrator John Angelus Ducas, who took his surnames of Comnenus and Ducas from his grandmother Theodora, a daughter of Alexius I and Irene Ducaïna (see Table 18). He had held a military command in Asia Minor in the years prior to 1204, and the circumstances of his acquisition of power in Greece are unknown. By late 1204 he had installed himself in Epirus and quickly made himself master of the whole western half of northern Greece, from the mouth of the gulf of Corinth as far north as Durazzo. What title he assumed is unknown – he is not termed *despotes* in contemporary written sources or on the coins – but in his ten years of power he maintained himself successfully against the Venetians who menaced him in the Adriatic and the rulers of Thessalonica who threatened his eastern frontier.

In 1212/13 Michael was murdered by a servant under obscure circumstances, and was succeeded by his half-brother Theodore (1212/13–30), as ambitious and able as himself. In 1217 Theodore had the good fortune to capture the newly elected Latin emperor Peter of Courtenay, whom he kept a prisoner till his death, and in 1224, after a long series of hard fought campaigns, he captured Thessalonica and destroyed the Latin kingdom. Since this made him master of northern Greece from the Adriatic to the Aegean he assumed the title of

Table 18 The rulers of Epirus-Thessalonica



The family name in western eyes should properly have been Angelus, and this was sometimes used, but its members in general preferred the more distinguished surnames of Comnenus and/or Ducas.

*basileus* and in 1225 had himself crowned as such by the archbishop of Ochrida. In 1228 he expelled the troops of John Vatatzes from Adrianople, which they had just succeeded in occupying, and it seemed for a brief moment as if he, and not his Nicene rival, had the best chance of recovering Constantinople. But the tsar of Bulgaria, John Asen II, came to the rescue of the Latin Empire, which he had hopes of gaining for himself, and Theodore sustained a shattering defeat at the battle of Klokotnitsa, on the Maritza, in April 1230. Theodore was taken prisoner and at first well treated, but he was subsequently blinded after being implicated in a conspiracy against the Bulgarian tsar. He was released in 1237, and from 1237 to 1246 was effective ruler of Thessalonica in the name of his two sons, but in

1252/3 he became again a prisoner, this time of John Vatatzes, and his subsequent fate is unknown.

With the battle of Klokotnitzza the greatness of the state founded by Michael I came to an end. All recent conquests were lost to the Bulgarians, and all hope of seizing Constantinople disappeared. Thessalonica was ruled first by Theodore's brother Manuel (1230–7) and then by his two sons John (1237–44) and Manuel (1244–6), after which it was annexed by the ruler of Nicaea. Epirus was briefly ruled by Manuel but almost immediately, apparently in 1231, became independent again under Michael II Comnenus Ducas (1231–68), son of Michael I, amongst whose descendants it was to remain for another century (to 1358).

The coinage of Epirus, presumably minted at its capital Arta, seems to have been meagre. Few specimens have been recorded, and while no doubt more will found in the future, the area may well have largely relied on older stocks and on the coinage of Thessalonica. Coins bearing the name of Michael Ducas can be attributed to Epirus with certainty, since the name does not occur elsewhere, though one may hesitate between Michael I and Michael II, and a number of coins in the Arta hoard ascribed by Mattingly to Michael II are really of Michael VIII Palaeologus. Coins of Theodore and Manuel struck in Arta can only be separated from those of Thessalonica on the basis of provenance and style, for the fine, elegant style of some of them is clearly related to that of seals reproduced by Bertelè. None of them give the ruler any title. Michael II was recognized by John Vatatzes as *despotes* sometime before 1252, when the same recognition was accorded to his son Nicephorus, and a remarkable coin was struck at Thessalonica to celebrate the occasion.

#### MICHAEL I, 1204–12/13

Two billon trachea attributed to Michael I by Lambros and Schlumberger are really of Michael VIII and Andronicus II. His only known coins are trachea of base electrum (effectively silver) having on the obverse a bust of Christ Emmanuel and on the reverse the standing figure of Michael, with the inscription ΜΗΧΑΛΑ ΔΘΚΑC [1277]. A specimen in the Numismatic Museum at Athens was published by Svoronos in 1908, wrongly attributed to Michael VII. The coin is more likely one of Michael I than of Michael II, since it closely resembles the next.

#### THEODORE, 1212/13–30

An exactly similar coin, but with Θ[COΔΩPOC], in the British Museum.

#### MANUEL, 1230–1

Hendy suggests that the coin described below as Class B of Thessalonica may have been struck at Arta, since like the coins of Theodore and Michael II it uses an omega instead of an omicron in starting the obverse inscription (Ω €MANΘHA).

## MICHAEL II, 1231–68

Two types of billon trachy are known. One has on the obverse a bust of Christ Emmanuel and on the reverse a standing emperor crowned by the archangel Michael [1278]. Hendy in 1969 attributed the Dumbarton Oaks specimen, on which the inscription was illegible, to Michael's uncle Manuel of Thessalonica, but another specimen in the BM, with MIX legible, allowed him to correct this later. The second type has on the obverse a half-length figure of St Michael and on the reverse the emperor being crowned by the Virgin, with MIXAHΛ|O|ΘΣ fully legible. A coin in the Arta hoard (Class VIII), which Mattingly attributed to Michael II in association with his son Nicephorus, is probably a coin of Thessalonica, but too confused by double-striking to make identification possible. For the Thessalonican coin showing John III Vatatzes crowning Michael II, see p. 266.

No coins are known of Nicephorus I or Thomas. Coins of Byzantine type were attributed by Lambros and subsequent scholars to Michael II's bastard son John (I), who ruled Grand Vlachia (Thessaly) from c.1268 to c.1289, and by Bertelè to John's son Constantine (1289–1303), but they are in fact Thessalonican issues of John III Vatatzes (Type A) and coins of the Latin Empire (Types K, L) respectively. Constantine's son John II (1303–18) struck deniers tournois at Neopatras (Schlumberger 382–3) on which he is styled ANGELVS SAB C, i.e. *Angelus Sebastocrator Comnenus*.

## Thessalonica


The history of Thessalonica is much more important than that of Epirus. In the period 1204–61 it falls into three distinct phases: that of the Latin kingdom (1204–24), that of Angelid rule (1224–46), and that of Nicene rule (1246–61).

## THE LATIN KINGDOM, 1204–24

In 1204, after much uncertainty and dispute, Thessalonica fell to the share of Boniface of Montferrat, the ablest and perhaps the most unscrupulous of the leaders of the Fourth Crusade. It brought with it the title of king and direct control over Macedonia and Thessaly, as well as a claim to the overlordship of the Frankish principalities further south. But Boniface was killed in 1207, fighting the Bulgarians, and the reign of his son Demetrius, who was barely two years of age at his accession, was one of confused misgovernment and civil war. The kingdom came to an end in 1224, when Thessalonica fell to Theodore of Epirus after a siege of nearly two years. Demetrius at the time was absent in the West, trying to organize a relief expedition, and died three years later, leaving his empty claims to the emperor Frederick II.

No coins exist in the name of either Boniface or Demetrius, and it is probable that none



were struck. Hendy has argued (pp. 209–10, 217), however, that certain anonymous trachea, which hoard evidence shows to have been minted in the first half of the thirteenth century and which differ in fabric and style from those ascribed to the Latin Empire (see p. 268), were struck at Thessalonica. Coins of his Class B are sometimes found overstruck on Class A, and on coins of both classes the pendilia of the imperial crown are designed , a rare form which goes back to the Thessalonican hyperpyra of Alexius I. As for Class C, its use of SS Constantine and Helena as a type links it up with an anonymous half tetarteron (Class B) which should probably be attributed to the same mint, where the striking of this denomination had been popular in the past.

The coins attributed to Thessalonica in this period are therefore as follows.

### *Copper trachea*

- A. Christ seated./Half-length figure of emp. [1262]
- B. Bust of Christ Emmanuel, but bearded./Emp. standing. [1263]
- C. Christ seated./SS Constantine and Helena standing. [1264]

### *Half tetartera*

- A. Bust of Virgin./Patriarchal cross on leaved base. [1265]
- B. St Helena standing./St Constantine standing. [1266]

## THE ANGELID (COMNENUS-DUCAS) PERIOD

Theodore Angelus, or Comnenus Ducas as he preferred to call himself, had been ruler of Epirus since 1212/13 (see p. 255) and his acquisition of Thessalonica in 1224 made him the most powerful sovereign in Greece. His career as ruler of Epirus and Thessalonica, where he had himself crowned *basileus* in 1225, has been described already. His reign, so far as the coinage is concerned, ended in 1230 with his capture at Klokotnitza, for although he was released in 1237 and remained the power behind the throne at Thessalonica between that date and 1246, during the reigns of his two sons, he did not again formally resume the imperial purple.

The three other rulers of the Comnenus-Ducas dynasty (see family tree on p. 256) were Theodore's brother Manuel (1230–7) and his sons John (1237–44) and Demetrius (1244–6). Manuel assumed power in 1230, on his brother's capture, but was deposed in 1237 as a result of a conspiracy organized by Theodore on his return from Bulgaria. He attempted to recover his position, with Nicene support, in 1239, but was bought off with the governorship of Thessaly, which he held until his death. John, serious-minded and pious, styled himself *basileus* up to 1242, when his namesake John Vatatzes invaded the kingdom, blockaded Thessalonica, and forced him to divest himself of the title, so that he had henceforward to

make do with *despotes*. This was likewise the only title assumed by his frivolous and pleasure-loving brother Demetrius, who succeeded him on his death in 1244 and whose reign was short. John Vatatzes had probably hoped to end the independence of Thessalonica in 1242, but had failed to push matters to a conclusion in view of the possibility of a Mongol attack on his dominions in Asia Minor. In 1246 he moved against Thessalonica again and with the help of a local conspiracy captured the city. Demetrius died a prisoner some years later in Bithynia. Only Epirus remained independent, having broken away from Thessalonica under Michael II in 1231 (see p. 257).

Coins are known of the reigns of Theodore, Manuel and John, but not of Demetrius, a fact not surprising in view of the disorder into which the coinage had fallen by the end of John's reign. The rulers normally style themselves *Ducas*, or rarely *Comnenus* or *Comnenus Ducas*, but never *Angelus*. Their title, where present at all, is normally *despotes*; only on a single tetarteron of Theodore is the emperor styled *basileus kai autokrator*. This fact is surprising in view of the store which Theodore attached to the title and the trouble taken by John Vatatzes to induce John to abandon it, but the numismatic evidence is clear. No gold is known of any of the rulers, though one might have expected some of Theodore, and there is very little silver, so that the bulk of the coinage consists of copper trachea, with a small sprinkling of tetartera and half tetartera. Many of the coins are large and well-struck, but others, not apparently later in date, range from small to minuscule in size, and it is hard to know how to account for this diversity in module, which has its parallel in the Latin series also (see pp. 268–71). They do not seem to be fractions, and the territory of Thessalonica was by the late 1230s scarcely extensive enough to accommodate another mint, even if one could envisage large- and small-module coins being struck simultaneously – John's reign was very short – in such a constricted area. The explanation must be left for future research.

The types have been discussed already (pp. 242–3). Some are known in only one or two specimens. Further ones may remain to be discovered, though as the matter stands at present there seems to be some correspondence between the number of classes of large copper trachea and the lengths of reigns – seven for Theodore (1224–30), eight for Manuel (1230–7), seven for John (1237–44) – as if there were annual changes of type as in the Empire of Nicaea (see p. 249). The letters or symbols (e.g. *lis*, crosses, stars) that are found on some issues probably represent the *signi* of individual moneyers (see p. 253).

There are a few problems of attribution. It is possible that some coins of Theodore I and Manuel should be given to Arta and not Thessalonica. With regard to rulers, coins of John Comnenus Ducas are distinguished from those of John III Vatatzes by their portraiture, since the first John, who was a young man, is always shown beardless, while John III had the long beard one sees on coins of Nicaea. Coins of Theodore I have sometimes in the past been attributed to Theodore II, since there are few with the distinctive names of Comnenus (which must belong to Theodore I) or Lascaris (which must belong to Theodore II), and *despotes* or *Ducas* could be applied to both. The evidence of the Arta hoard, however, shows fairly certainly that the only copper trachea of Theodore II are those with the Lascaris title.

The following lists reproduce Hendy's attributions and labelling of classes, which does not necessarily correspond to their chronological order of issue. A selection of coins are illustrated on Pls 73–6.

*Theodore I Comnenus Ducas (Thessalonica, 1224–30)*

*Silver trachea*

- A. Seated Christ./Emp. and St Demetrius holding haloed cross. [1193]
- B. Virgin Hagiosoritissa (so labelled)./St Demetrius handing model of Thessalonica to emp. [1194]
- C. Seated Virgin./Emp. crowned by Christ. [1195]

The reverse type of B suggests that it may have been issued immediately after the capture of the city. These coins, as Hendy notes, are remarkable in showing the emperor wearing a loros of traditional type, such as had not appeared on the coins for nearly a century. The same type of loros was to be used again occasionally under Manuel (Type G) and John III (Types A and B of Thessalonica).

*Copper trachea*

- A. Bust of Christ Emmanuel./Emp. and St Demetrius. [1196]
- B. Christ seated./Emp. crowned by St Demetrius. [1197]
- C. Virgin seated./Emp. and St Theodore. [1198]
- D. Christ seated./Emp. and St Michael, who holds model of Thessalonica. [1199]
- E. Virgin standing *orans*./Emp. crowned by Christ. [1200]
- F. St Demetrius standing./Half-figure of emp. and Virgin.
- G. Bust of Christ Emmanuel./Emp. standing.

On the last of these, where there is no saint and room is available, a fuller inscription than usual is possible: ΘΕΟΔΩΡΟΣ ΔΕ ΣΠΟΤΗΣ ΚΟΜΝΗΝΟΣ Ο ΔΕΚΑΣ. Bendall has published a specimen of Type C overstruck on Type F, showing their relative order.

*Tetarteron (AE)*. Two varieties of this are known, both copied from a miliaresion of Nicephorus III [976] and having on one face an inscription in several lines, on the other an elaborate cross potent on steps between the busts of the emperor and St Demetrius. One [1201] has a short inscription in which the emperor is styled only *despotes o doukas*, while the other is longer and gives him his full title: ΕΝ ΧΩ ΤΩ ΘΩ ΠΙCΤΟC ΒΑCΙΑΕVC ΚΑΙ ΑΥΤΟΚΡΑΤΩΡ ΡΩΜΑΙΩΝ Ο ΔΕΚΑΣ. Bendall, who published the only known specimen of the second type, suggested that it was the earlier of the two, but it is more likely the later, having been struck after Theodore's coronation in 1227/8.

*Half tetarteron (AE)*

- A. Bust of Virgin./Emp. standing. [1202]
- B. Half-figure of St Demetrius./Emp. standing, holding gl. cr. in l. [1203]
- C. Same obv./Emp. standing, holding gl. cr. in r. and labarum sceptre in l. [1204]

The second of these calls the emperor KOMNHNOC, while A calls him *despotes* and C only *Ducas*.

*Manuel Comnenus Ducas, 1230–7*

Manuel's only known coins are silver and copper trachea. They all bear his name, with the title *despotes*. A better specimen of Hendy's original Type E has been found to read MIX and been transferred to Epirus and the present Type E is one he originally published as a supplement (his Pl. 51.7, 8). He also suggests that Type B of the silver may have been struck at Arta; one specimen at least has been found in Albania. On Type D the emperor and saint each carry a palm, an emblem still unexplained. Type G, with the emperor and St Demetrius holding a model of the city labelled ΠΟΛΙΣ ΘΕΣΣΑΛΟΝΙΚΗ in several lines, is perhaps an accession issue. For the possible attribution of an anonymous coin with St Michael to 1230 see p. 265.

*Silver trachea*

- A. Bust of Christ Pantocrator./Emp. crowned by Virgin. [1205]
- B. Bust of Christ Emmanuel./Emp. and St Demetrius.
- C. Virgin seated./Emp. and St Michael holding sword.

*Copper trachea*

- A. Bust of St Demetrius./Emp. crowned by Christ. [1206]
- B. Virgin seated./Emp. and St Michael holding standard.
- C. Bust of Virgin *orans*./St Demetrius (?) handing gl. cr. to emp. [1207]
- D. Bust of St Michael./Emp. and St Constantine holding patriarchal cross and palms. [1208]
- E. Bust of Christ Emmanuel./Emp. crowned by St Constantine.
- F. Bust of St Theodore./Half-figure of emp. and St Demetrius. [1209]
- G. St Michael standing./Emp. and St Demetrius seated, holding model of Thessalonica. [1210]

*John Comnenus Ducas, 1237–44*

*Copper trachea.* John's only known coins, apart from a single type of tetarteron, consist of copper trachea. Most of them bear his name, sometimes in full (ΙΩΑΝΝΗC), with the title of

*despotes* but without *Ducas*; only the tetarteron styles him *Comnenus Ducas*. Some anonymous coins are attributed to him because of their resemblance to types for which he was responsible and their unlikeness to others of the period. Certainly they are of the same date and area, since signed and unsigned coins have been found together in hoards, but some of them may have been struck after his death. John's coinage, which is remarkable for its diversity in type and module, though each individual type is rare, was studied in some detail by Laurent and Bertelè, and subsequently by Hendy and Bendall, but its main problems are still unresolved.

The types involving winged persons or objects, and even detached wings, have been commented on already (p. 242). Other novelties are a large flower occupying the entire obverse field, and two large *lis* accompanying a figure of St Theodore, who is himself unusually prominent on John's coinage. Such a profusion of types is remarkable for a reign that lasted no more than seven years. Stranger still is the change in the module of the coins. There are six types of trachy of traditional size (Hendy's Series I), and six more of slightly smaller module and thicker fabric (Series II), suggesting an annual change of type. But there are also some twenty-five types (Series III) appreciably or very much smaller in size, the smallest being tiny cup-shaped pieces a little over 10 mm in diameter as against the 28/30 mm of normal trachea. All of Series I and all but one of Series II are reproduced in Series III, but most of the latter are independent in type. Bertelè believed that the smaller coins are half trachea, and it seems to me possible that this may be the case where coins of the same types are concerned. Hendy, however, holds that a sharp weight reduction of the trachy had taken place, and points out that the smallest issues have been found in a number of hoards with fragments cut from trachea of Theodore and Manuel and with small coins of the class of 'Latin Imitations'. One is tempted to attribute the smallest coins to a mint other than Thessalonica, but the problem of where it could have been remains unsolved.

The following list of types follows that of Hendy's draft for *DOC* 4, so that it includes some unknown to him in 1969 and involves the relettering of Series II and most of Series III. Where the new references differ from the old, the latter are added in parentheses.

*Series I (large)*

- A. St Demetrius seated./Emp. and Virgin holding haloed cross. [1211]
- B. St Theodore standing between two *lis*./Emp. crowned by St Demetrius. [1212]
- C. Virgin seated./Emp. standing. [1213]
- D. Bust of Christ./Half-length figures of emp. and St Demetrius. [1214]
- E. Bust of St Theodore./Busts of emp. and St Demetrius holding haloed cross. [1215]
- F. Haloed cross between wings./Half-length figure of emp, crowned by saint (Nicolas?).

*Series II (medium)*

- A(F). Bust of St Demetrius./Emp. crowned by Virgin. [1216]
- B(G). Eagle./Cross on steps between busts of emp. and St Demetrius. [1217]
- C(H). St Demetrius seated with sword./Half-length figure of emp. [1218]
- D(I). Bust of St Michael. Emp. seated. [1219]
- E. Bust of Christ./Half-length figure of emp.
- F. Lis./Saint and emp. standing.

*Series III (small)*

- A(A). As A of Series I. [1220]
- B(B). As B of Series I.
- C. As C of Series I.
- Da(Ca). As E of Series I. [1221]
- Db(Cb). Same, but emp. and saint full-length.
- E. As F of Series I.
- F(D). As A of Series II. [1222]
- G. As B of Series II.
- H. As C of Series II.
- I. As E of Series II.
- J(N). As E of Series II.
- Ka. Bust of archangel./As F of Series II.
- Kb. Archangel standing./As last.
- La. Head of winged cherub./Emp. and saint (Demetrius ?). [1223]
- Lb. Cross and  $\overline{\text{IC}} \overline{\text{XC}}$ ./As last.
- M. Wing./Emp. and saint standing.
- N(G). Radiate patriarchal cross./Emp. and St Demetrius holding model of city. [1224]
- O(H). Virgin seated./Emp. standing.
- P(I). Crescent between stars and pellets./Emp. standing with model of city. [1225]
- Q(J). Radiate cross./Emp. standing. [1226]
- Ra(K). Wing./Large standard and emp. [1227]
- Rb(L). Large B./As last.
- S(M). Large B and standard./Virgin seated. [1228]
- T(Q). Flower./Virgin standing.
- U(O). Bust of Virgin *orans*./Winged emp. standing.
- V(P). Wing./Winged bust of emp. above wall.
- W. Cross and four pellets./Half-length figure of emp. beneath arch.
- X. Uncertain (only specimen a brockage)/Busts of emp. and saint holding lis.
- Y. St Demetrius standing./Emp. standing.

*Tetarteron.* John's tetarteron has a four-line inscription and a cross on steps between  $\overline{\text{IC}}$  and  $\overline{\text{XC}}$ . Hendy concludes from its weight that it is a half, but the module points to it being a full tetarteron.

*Demetrius Comnenus Ducas, 1244–6*

No coins bearing the name of Demetrius are known, but the minting of small trachea may have continued during his brief reign, more especially since some of them are without the name of John. He may also have been responsible for a small-module trachy showing a standing saint and emperor and having on the obverse a wing with an arm holding a sword [1229]. Bertelè gave it to John Comnenus Ducas, to whose coins it is related in type and module, but Hendy objects that the emperor is shown bearded and prefers to leave its attribution open.

Hendy has tentatively attributed to the years 1242–6 a finely designed trachy having on the obverse a bust of Christ and on the other a standing figure of St Michael, since the absence of an imperial effigy might be explained by the circumstances of neither John nor Demetrius having in these years the rank of *basileus*. The size of the coin points in my opinion to an earlier date, and the fact of there being four specimens at Dumbarton Oaks would associate it rather with the coinage of Theodore and Manuel, who are much more plentifully represented there than is John. It may perhaps have been struck in 1230, when it must for a time have been uncertain which ruler should be represented on the coinage.

THE NICENE PERIOD, 1246–61

The capture of Thessalonica by John III in 1246 opened a new phase in the history of the city. The mint was kept in existence to provide coinage for the European provinces of the Empire. Its coins are distinguished from those of Magnesia by their general appearance and fabric, and by the role in their types played by St Demetrius. The Arta hoard, with sixty-five coins of Thessalonica as against two of Magnesia, is evidence of their predominance in the circulating medium of the Balkan peninsula.

The period 1246–61 is covered by three reigns. Coins of John III (1246–54) consist mainly of copper trachea, and no fewer than eleven types have been attributed to him. His name is reduced to the letters  $\overline{\text{I}\overline{\omega}}$  and he is styled *despotes* or Ducas, but his coins can be distinguished from those of John Comnenus Ducas by his characteristic forked beard. One type revives that used in the previous period showing the emperor and St Demetrius holding a model of Thessalonica [1235], and two others [1230, 1231] have a detached wing in the field quite in the manner of coins of John Ducas Comnenus, though without an exact prototype. Three [1230, 1231, 1232] show the emperor holding an unusually large and prominent *akakia*. The type showing St Peter holding the keys [1239] was presumably a piece of propaganda intended to remind folk of the Petrine attributes at a time when negotiations for

the Union of the Churches were underway. It is perhaps contemporary with the coins of similar types struck in the Latin Empire (Types S, T).

The copper trachy showing John III crowning Michael II of Epirus is also of exceptional iconographical and historical interest. Michael wears not a normal imperial crown with pendilia but the bulbous *stematogyryon* of a despot, derived from the old *kamelaukion* of a Caesar, and he holds a palm, a symbol occurring on some other coins of the period (see p. 262), instead of a sceptre. On the first two specimens of the coin to be published the ruler's name was illegible and he was tentatively identified as John Comnenus Ducas of Thessalonica, it being supposed that the occasion of its issue was this ruler's abandonment of the title of *basileus* in 1242 at the demand of John III, who consented to recognize him as despot (see p. 259). A further specimen has shown that the figure being crowned is accompanied by the letters MX, i.e. Michael, who can only be Michael II of Epirus. The coin, which is of typical Thessalonican fabric, must have been struck after 1246 and before 1252, when we know that John III conferred the coveted title on Michael's son Nicephorus, who had been betrothed to his grand-daughter Maria. He is scarcely likely to have done this without having earlier conferred this title on Michael, and the coin suggests strongly that it had actually taken place in a formal ceremony, and not simply by letter.

With Theodore II (1254–8) the output of the mint suddenly declined. Only a single type of trachy, giving him the surname Lascaris, is known, and the contents of the Arta hoard suggest that it is the only one that was struck (see p. 260). The same hoard indicates that three of the Thessalonican types occurring in it (T2, 3, 4 and 16 on p. 303) also belong to the Nicene period, but it is more convenient to class them with the remaining Thessalonican coinage of Michael VIII's reign.

#### *John III Ducas Vatatzes, 1246–54*

Hendy's order of types has been left unchanged. Class A of the copper has been wrongly attributed to the Sebastocrator John Ducas of Grand Vlachia; see p. 258.

#### *Silver trachy*

- A. Bust of Christ./Emp. and St Demetrius holding model of Thessalonica. [as 1235]
- B. Virgin seated./Emp. and saint holding labarum.

#### *Copper trachy*

- A. Bust of Virgin./Emp. standing, wing in 1. field. [1230]
- B. Bust of St Michael./Emp. seated, wing in 1. field. [1231]
- C. St Demetrius seated./Emp. standing, star in r. field. [1232]
- D. St Demetrius seated./Emp. standing. [1233]
- E. Virgin seated./Emp. and St Demetrius holding patriarchal cross. [1234]



- F. As Type A of silver. [1235]
- G. Virgin standing between two stars./Emp. and St Demetrius holding labarum. [1236]
- H. Bust of St George./Half-length figure of emp. and St Demetrius. [1237]
- I. St Demetrius standing./Half-length figure of emp. [1238]
- J. St Peter with keys./Half-length figure of emp. [1239]
- K. Bust of Christ./Half-length figure of emp. [1240]

*Copper trachy of John with Michael II of Epirus*

Half-length figure of St Michael./John III crowning Michael II.

*Theodore II Ducas Lascaris, 1254–8*

Theodore II's single type of copper trachy [1241] has on the obverse a new type, an elaborate cross filling the entire field. The reverse is the now familiar type of the emperor and St Demetrius holding a model of Thessalonica.

## The Latin coinages

The Latin states in the Aegean area were slow to inaugurate identifiable coinages of their own, and the abundant issues of deniers tournois which have familiarized collectors with the names of many of the Frankish princes belong to the second half of the thirteenth and the early decades of the fourteenth centuries. The apparent gap in minting of nearly half a century has led to many attempts to fill it, more especially since the contemporary historian Nicetas Choniates, who witnessed the sack of Constantinople in 1204, asserts that the invaders melted down statues from the Hippodrome to make into coin, and one of the clauses in the treaty of 1219 between Theodore I of Nicaea and the Venetian podestà of Constantinople provides that neither party shall mint hyperpyra, *manuelati* or *stamena* imitating those of the other. Sabatier attributed to the Latins several issues of what are now classified as Anonymous Folles, but Wroth rightly transferred these back to the eleventh century, while less happily suggesting that some of them might have been struck by participants in the First Crusade. It was left for Hendy to identify the missing coinages on the basis of hoard evidence. They are for the most part copper trachea, partly imitated from twelfth-century issues and partly original in design, but none bears the actual name of any Latin emperor. In addition, there are some types of tetartera and half tetartera.

The type of evidence on which these identifications are based is essentially that of the kind already discussed in connection with the Bulgarian imitative coinages of the decades before 1204. The coins in question are those that first occur in hoards that must be dated after 1204, either because they contain coins of Theodore I of Nicaea or because they contain other imitative coins which hoard evidence has shown to be associated chronologically with these.

Dozens of hoards and many thousands of coins provide a self-consistent picture whose evidence cannot be gainsaid. It has been queried on the ground that an imitative coinage of this kind is in itself improbable, and is inconsistent with the dignity of the Latin Empire, but such objections cannot be sustained. Imitative coinages are a common phenomenon in numismatics. The Latin imitations had their predecessors in the pseudo-imperial coinages issued by the Germanic peoples in the fifth and sixth centuries, and by the Arabs in the seventh; they were indeed not basically different from the imitations of Muslim dinars and dirhems which the contemporary Crusaders in Palestine issued on a substantial scale until stopped by Pope Innocent IV. They were a commonplace in western feudal practice, where the notion of minting as a royal prerogative, a *ius regale*, was one not widely accepted, and many great French feudatories were, in the twelfth century, still minting in the names of Carolingian sovereigns. In any case, the coinage was that of the Latin Empire, not of the Latin emperors. The treaty of 1219, in making no mention of the emperor, implies that coins were being struck in Constantinople by the Venetians, who held three-eighths of the city in full sovereignty and may well have inherited with their share the ancient mint.

It is impossible to set out the hoard evidence here on which the attributions of the Latin coinage are based; reference must be made to Hendy's book. The coins differ from twelfth-century issues in their metallic composition, for they are effectively of pure copper, and by the fact that even where they are basically imitative they do not correspond exactly to the originals and exhibit features that never occur on coins found in twelfth-century hoards. They form essentially three major groups. One consists of twenty-two classes, Types A–T in Hendy's description of 1969 and a further couple (Types U, V) now to be added from the so-called 'Peter and Paul' hoard. Of these Type A is very common and widely diffused in the hoards, Types B and C are fairly common, and the remainder tend to be rare, with a few known only in unique specimens. This group is best ascribed to the Latin Empire, which initially had a fairly substantial territorial base but quickly contracted to a relatively small region close to the capital. Its longevity accounts for the number of types it issued, and its western character is underlined by the presence on two of the later issues of SS Peter and Paul, who played no role at all in normal Byzantine coinage. The second group in Hendy's classification consists of three classes of copper trachea and two of tetartera and half tetartera, which can best be assigned to the short-lived kingdom of Thessalonica (1204–24). The third group consists of six types of small-module trachea copied from the first two classes of Constantinople, the earliest one of Theodore I of Nicaea, and all three of Thessalonica. It is ascribed to a mint in central Greece, probably Corinth. To it should perhaps be added some or all of the tetartera and half tetartera in the name of Manuel I (see p. 233) which are currently ascribed to a mint in central Greece and dated to the twelfth century.

The second group of coins has already been dealt with on p. 259; the first and last remain to be listed.

## THE LATIN EMPIRE

Although the treaty of 1219 (see p. 267) refers to imitations of hyperpyra and *manuelati* (i.e. silver trachea) as well as *stamena* (i.e. copper trachea), no gold or silver coins that can be attributed to the Latins have been identified. It is possible that they may still come to light, but treaties are drawn up by lawyers, anxious to cover all possible contingencies, and such precious metal coins may well never have existed. Pegolotti's reference to *perperi latini* (see p. 241) is no proof to the contrary, for he was writing at a much later date and merchants' manuals are notoriously unreliable regarding the provenance of old or foreign coins.

The list of copper trachea that follows reproduces that of Hendy 191–9, with the two additions from the 'Peter and Paul' hoard. The coins are of large module and often well struck, though the legends are fragmentary and blundered. Classes A–D occur in a number of hoards datable to the first decade after the conquest, and a specimen of Type C has been found overstruck on one of Type B. Many of the later ones occur in such hoards as those of Preslav and Tri Voditsi, datable by the presence of coins of John III of Nicaea or John Ducas Comnenus of Thessalonica to the middle decades of the century. For others there is no hoard evidence available, and their attribution and placing depends on their resemblances to other coins in the series.

It is naturally impossible, on present evidence, to construct a satisfactory order of issue. The mint began by imitating, in an approximate fashion, the coins of twelfth-century emperors, including even their names, with a preference for Manuel I but including also John II, Andronicus I and Alexius III. The imitations differ slightly in type from genuine coins of the emperors in question – the emperor will hold a sword instead of a globus cruciger, or will wear a chlamys instead of a loros – and tend to ignore such details of the design as the form of the pendilia or the decoration of the loros-waist which fitted the originals into a precise pattern of officinae and issues. Later quite new types appear, often exclusively religious in character (Types P–U), including the two of purely Latin interest with SS Peter and Paul. The identification of many of them has raised problems in the past. Coins of acceptable style and legible imperial names were normally included amongst these emperor's coins, Type A, for example, being given to Manuel I (so W. 577, no. 58), Type D to Manuel Comnenus Ducas (so WV 199, no. 4). Other attributions were made more or less at random, e.g. Type P by Wroth to John and Demetrius Comnenus Ducas (WV 202–3, nos 1–7). Since there was no emperor Constantine, Types K and L were given by Bertelè in 1926 to Constantine Ducas, sebastocrator of Thessaly (c. 1289–1303), for whom no coinage is in fact known; fortunately a specimen in the Preslav hoard gives its approximate date, half a century earlier. The attribution to the Latin Empire of many of the types, and in particular of Type D, has been queried by Metcalf in his account of the 'Peter and Paul' hoard, but his arguments, where I can follow them, do not convince me that there is any justification for ascribing to the coins a Bulgarian origin.

*Copper trachea, large module*

- A. Virgin seated on high throne./Emp. standing with labarum and akakia (*Manouel despotes* or *Porphyrogen*). [1242]
- B. Christ seated on high throne./Emp. standing with sword and gl. cr. (similar inscr.). [1243]
- C. Virgin seated on high throne./Emp. seated (*Alexios despot*). [1244]
- D. Bust of Christ./Emp. standing with cross and gl. cr. (*Manouel despotes*). [1245]
- E. Bust of Christ./Emp. with labarum and globus with patriarchal cross (*Manouel despotes?*). [1246]
- F. Christ seated on low throne./Emp. crowned by Virgin (*Manouel desp*). [1247]
- G. Virgin seated on high throne./Emp. and saint holding labarum (*Manouel desp*). [1248]
- H. Virgin seated on high throne./Emp. crowned by Christ (*Andronikos despotes*). [1249]
- I. Virgin *orans* half-r./Emp. crowned by Christ (*And to Ko*).
- J. Archangel standing./Emp. standing with drawn sword and gl. cr. (*Kon despotes*). [1250]
- K. Bust of Christ./Emp. standing with labarum and globus with patriarchal cross (*Kons*). [1251]
- L. Christ seated./Emp. standing with labarum and sword (*Knoc*). [1252]
- M. St Michael standing./Emp. standing with labarum and gl. cr. (*Doui despot*). [1253]
- N. Half-length figure of Virgin *orans*./Emp. and St George holding patriarchal cross on steps (*kw despotes*, columnar). [1254]
- O. Christ standing./Emp. standing with labarum and gl. cr. (*kw desp Porphy*, columnar). [1255]
- P. Bust of Christ Emmanuel./St Michael standing. [1256]
- Q. Virgin seated on high throne./St Michael standing. [1257]
- R. Christ seated on low throne./Virgin standing. [1258]
- S. Virgin standing half-r. (*H Agiosoritisa*)/St Peter standing with cross and keys (*O Agios Petros*). [1259]
- T. Virgin Hagiosoritissa (with inscr.)/SS Peter and Paul embracing (with inscr.). [1260]
- U. Half-length figure of St Nicholas facing (O|AI|N)/St John Baptist facing (AII|IΩO|OM, i.e. *Prodromos*).
- V. Cross on base, ICNK in angles./Emp. standing, holding spear and gl. cr.

*Half tetarteron*

Christ standing./Emp. standing.

## THE PRINCIPALITY OF ACHAIA

We have two accounts of the origins of Frankish coinage in the Morea, one attributing it to the first prince, Geoffrey I of Villehardouin (1209–18), the other to his second son William (1245–78). The first must on various grounds be condemned, but the second, preserved in the fourteenth-century *Istoria del Regno di Romania* by Marino Sanudo, which relates how William was granted the right of striking deniers tournois of the same weight and fineness as those of France, has been generally accepted. Hoard evidence suggests, however, that the minting of tournois did not begin for ten or fifteen years after 1250, when St Louis and William met in Crete, and in any case the issue of tournois was preceded by that of other billon coins of varying designs. None of these, however, is likely to antedate 1250, so that in the Morea there is, as at Constantinople, a gap that can best be filled by a group of imitative copper trachea.

The coins in question are ones copied from those struck during the decade after 1204 in Constantinople and the Empire of Nicaea, and for rather longer in Thessalonica. The coins are distinguished from their prototypes by their smaller size and by details of design, as well as by their hoard distribution. Hendy has noted that in early hoards from the Struma valley which contain a fair proportion of the coins used as models the proportion of small-module copies is small, while in later hoards the proportion of prototypes is much smaller and that of copies larger, as if the latter were both later in date and coming from further away. Small coins also appear among issues of John Comnenus Ducas of Thessalonica, and are consequently late in date.

*Copper trachea, small module*

- A. As Constantinople A (Virgin seated./Emp. standing with labarum and akakia.). [1267]
- B. As Constantinople B (Christ seated./Emp. standing with sword and gl. cr.). [1268]
- C. As Constantinople C (Virgin seated./Emp. seated.). [1269]
- D. As Thessalonica A (Christ seated./Half-length figure of emp.). [1270]
- E. As Thessalonica B (Bust of Christ Emmanuel bearded./Emp. standing.). [1271]
- F. As Thessalonica C (Christ seated./SS Constantine and Helena standing.). [1272]
- G. As Theodore I of Nicaea, Type 2 (Virgin seated./Emp. and St Theodore holding patriarchal cross.). [1273]

## Miscellaneous derivative coinages

In addition to the imitative and derivative coinages discussed in the preceding sections, there existed in other states either occasional borrowings or derivative issues, essentially Byzantine

in character, which preceded the emergence of properly 'national' coinages. Some of them, while preserving such 'Byzantine' features as a concave fabric or standing figures wearing imperial costume, have Latin or even French inscriptions, and are consequently not likely to be confused with true 'Byzantine' coins. Such are the billon concave *ducales* of Roger II and William I of Sicily, with a bust of Christ and the standing figures of the king and his son; the concave electrum 'bezants' struck by several thirteenth-century kings of Cyprus, with a seated Christ and a standing sovereign; and the very rare concave coins of poor quality billon, struck in Corfu or Durazzo by Manfred of Sicily as *dominus Romanie*, with a Hohenstaufen eagle and a cross with four stars. But others, the earliest coins of the tsars of Serbia and Bulgaria and of the emperors of Trebizond, can easily be confused with true 'Byzantine' coins, and since they have sometimes been the cause of trouble they should be noticed here. For coins of Byzantine appearance mistakenly attributed to the rulers of Thessaly (Neopatras) see p. 258.

#### SERBIA

The typical grosh of medieval Serbia is a flat silver coin, weighing about 2 g, which initially reproduced the types of the Venetian grosso but subsequently developed national designs of its own. In the late thirteenth century, and even more conspicuously in the middle decades of the fourteenth, it was the most important coin of the Balkan peninsula, having behind it huge supplies of silver from newly discovered mines in southern Serbia. The earliest grosh, however, struck under Stephen Urosh I (1243–76), were preceded by rare concave coins of Byzantine pattern, in both silver and copper, struck by Stephen Radoslav (c. 1228–33), whose relations with Thessalonica were very close. His wife was a daughter of Theodore Comnenus Ducas and on his coins he styles himself Ducas, as he was entitled to do through his mother Eudocia, daughter of the emperor Alexius III and Euphrosyne Ducaina.

Stephen Radoslav's coins are as follows.

A. AR. Half-figure of St Michael./Tsar crowned by Christ, with columnar inscriptions reading CTEΦANOC ΠΙΞ Ο ΔΘΚΑC (i.e. Στέφανος ρίξ (*rex*) ὁ Δούκας) and Ο ΠΑΝΤΟΚΡΑΤΟΡ. The model for the obverse seems to be Type D of the copper trachea of Manuel Comnenus Ducas of Thessalonica and for the reverse Type C of the silver of Theodore Ducas. There may, of course, be some closer prototype yet to be discovered. [1279]

B. AE. Bust of Christ Emmanuel./Tsar crowned by the Virgin, with inscription CTEΦANOC ΠΙΞ ΟΔ. Both types are too common for there to be any certain models, but the obverse was probably taken from Class B of Manuel Comnenus Ducas' silver trachy, and the reverse is a variant of his Class A. [1280]

C. AE. Christ seated on low throne./Emperor and St Constantine holding patriarchal cross, with inscription CTEΦANOC ΠΙΞ ΟΔ ΘΚΩΝCΤΑΝΤΙΝΟC. The model

for the reverse is the billon Type D coin of Manuel just referred to. Stephen, it may be noted, was Manuel's uncle by marriage, having married Theodore's daughter Anna.

It has been suggested that these coins were for the most part actually minted in Thessalonica, since their likeness to Thessalonican models is so close, but the secondment of mint personnel was common in medieval times and it is more likely that they were struck in Serbia. Excavations during the 1970s in the remains of the medieval fortress of Ras, at the junction of the Sebečevska and the Raška, brought to light the remains of a mint with a number of Radoslav's coins and blanks. These included nearly twenty strikes in copper of the reverse of Radoslav's silver coin, as if no die for striking the obverse was available.

The first type of the copper trachy was only published in 1969, but the second has been known since 1914, when Stockert described two specimens and correctly identified them. A later proposal by D. Švob to reattribute them to Stephen Gabrielopoulos, sebastocrator of Thessaly (ob. 1335), is wide of the mark. Presumably Radoslav's own Byzantine leanings led him to strike the coins, for none are known of his brother and successor Vladislav, and when coinage was reintroduced by Stephen Urosh I it followed the Venetian pattern.

#### BULGARIA

Bulgaria lacked the economic resources of Serbia, and in particular a plentiful supply of silver. Although its typical late medieval coinage, like that of Serbia, consisted of silver grosh, they were lighter in weight, cruder in style, and rougher in fabric. It had in contrast a much larger subsidiary coinage of fractional silver and copper. Much of this, especially in the fourteenth century, is hard to distinguish from similar coinages of the Palaeologids, and has often been confused with them. The light mid-fourteenth-century grosh resembles the basilica of Andronicus III and John V, the fractional silver that of the later Palaeologids, and the copper coins the tetartera of Michael VIII and Andronicus II. Bulgarian coins, it is true, have their inscriptions or monograms in Cyrillic characters and not in Greek, but the inscriptions are often difficult to read and the badly formed monograms unintelligible. The bulk of the coinage, however, is not 'Byzantine' in the sense in which the term is being used here.

This was not true at the beginning. The earliest coins were the pseudo-imperial trachea described in Chapter 7, pp. 277–8, and datable to the period *c.* 1190/*c.* 1220. Subsequently John Asen II (1218–41) and Constantine Asen (1257–77) struck concave coins in their own names comparable to those of Stephen Radoslav. Constantine's have as types a bust of Christ and the tsar on horseback or seated or standing, or a bust of the Virgin and the tsar standing; they are too different from Byzantine coins to be easily confounded with them. But John Asen's coins are directly Thessalonican in inspiration, and one of them is remarkable in being of gold. The inscriptions, which give the names and title of the tsar and the name and attributes of Christ (*tsar slavi*, lit. 'Emperor of Glory') and St Demetrius, are in Cyrillic.

A. AV (somewhat base). Christ standing./Tsar crowned by St Demetrius.

B. AE. Bust of Christ./Tsar and St Demetrius holding sceptre surmounted by star.  
[1281]

Only a single specimen of the hyperpyron, now in Sofia, is recorded. It has every appearance of being genuine. The obverse type was common, but the use of the term 'Emperor of Glory', which may be compared with the *pantokrator* on the coin of Stephen Radoslav, is noteworthy. The reverse is a very close copy of Type II of the silver trachy of Theodore Comnenus Ducas of Thessalonica.

The second coin is fairly common, much more so than its Serbian counterpart. It was published by Mouchmov in 1913, but the two specimens at his disposal were only partly legible and he attributed it to one or other of John Asen's predecessors, an error which he subsequently corrected. The reverse type is generally Thessalonican in inspiration [cf. 1193], though the star surmounting the sceptre must, as Hendy has noted, have been copied from a coin of Nicaea [cf. 1144]. The general appearance is so 'Byzantine' that Mattingly conjecturally attributed the two specimens in the Arta hoard (Class XIII) to John III of Nicaea. The coinage as a whole probably dates from the great expansion of Bulgarian power in the decade after the victory of Klokotnitsa, which the striking of the hyperpyron may have been intended to celebrate.

#### TREBIZOND

The Empire of Trebizond was the most remote of the Byzantine successor states as well as the longest lived, surviving the fall of Constantinople and succumbing to Mehmed the Conqueror only in 1461. It was situated in the extreme south-eastern corner of the Black Sea, stretching from the region of Samsun to just west of Batum on the Georgian frontier. It was in consequence far removed from any land contact with Constantinople, and it was separated by the densely forested Pontic Alps from the interior of Anatolia, ruled by the Seljuqs of Iconium. It had a tradition of local independence going back to the late eleventh century, when the theme of Chaldia became a quasi-fief of the Gabras family (see p. 228).

Strictly speaking, indeed, Trebizond was not a successor state, for its founder was already in rebellion before 1204. Alexius Comnenus, a grandson of the emperor Andronicus I, had fled from the capital with his brother David sometime during the last years of Angelid rule, and with the help of troops furnished by his kinswoman, Queen Tamar of Georgia, had made himself master of Trebizond, Sinope, and even Heraclea (Ereğli) in the same month that Constantinople fell to the Latins. The western extension of the empire was soon lost, Heraclea being occupied by Nicene troops in 1214 and Sinope by the Seljuqs. Alexius was succeeded in turn by his son-in-law Andronicus I Gidon (1222–35) and his two sons John I (1235–8) and Manuel I (1238–63), from the last of whom all later rulers were descended. It was probably in 1282 that they deferred to Palaeologid susceptibilities by exchanging the title



of *basileus Romaion*, hopefully assumed by Alexius, for one no less grandiose if lacking the same traditional overtones: ‘Emperor of all the East, of the Iberians [Georgians], and of the Lands Beyond [i.e. presumably those in the Crimea], the Grand Comnenus.’

The thirteenth and fourteenth centuries were ones of great prosperity in the whole Black Sea area, and not least in Trebizond itself. The city was the terminus of a trade route that led inland to Tabriz and thence to the Persian Gulf and the Indian Ocean: Marco Polo and his companions passed through it on their return journey from China in 1295. The city was also in a position to profit from the trans-Asiatic trade which debouched on the lower Volga and reached the Sea of Azov and the Black Sea through Tana and Caffa (Feodosiya) in the Crimea. Its characteristic coinage consisted of what were termed *aspers*, flat coins of good silver – Marco Polo comments on the importance of the silver mines between Trebizond and Erzurum – having on one side the figure of St Eugenius, a local martyr who perished under Diocletian and became the patron saint of the city, and on the other the emperor, either standing or on horseback. They are unrelated to the coinage of Constantinople but resemble in size and fabric the *dirhems* of the Seljuqs of Rum – their weight of *c.* 3 g is that of the traditional *dirhem* – and the *trams* of Cilician Armenia. Since they belong to a different coinage system, and Trebizond was never subject to Constantinople after 1204, they need not be discussed in a book on Byzantine coins.

As with Serbia and Bulgaria, however, the ‘national’ coinage of Trebizond was preceded by one more closely related to that of Byzantium. The *aspers* date from the reign of Manuel I – the coins formerly attributed to John I are really of John II (1280–97) – and started as large concave coins 27 mm in diameter, before contracting to the flat and smaller fabric (20 mm) of all later ones. There also exist concave copper coins of Manuel and of George (1266–80), but none of these, having on their obverse the prominent bust of St Eugenius, or in one case that of St George, is likely to be confused with any Byzantine issue. But Manuel’s coinage was preceded by at least two of copper *trachea* much more ‘Byzantine’ in appearance. One, of which only a single legible specimen has been published, is purely religious in type, having on the obverse the standing figure of St Andronicus and on the reverse that of the Virgin. The columnar inscription on the reverse reads KOMNNC|OΓΔΩN, i.e. the family name of Andronicus with his cognomen *Gidos* (i.e. *Guidon*) which is attested in the literature. This type was preceded by one having on the obverse a seated figure of the Virgin holding a medallion of Christ and on the reverse a standing emperor crowned by Christ. There are many variations in the details: the Virgin’s throne is sometimes without a back, sometimes with one, or the emperor may wear *loros* or *chlamys*, or hold a plain *globus* instead of a *globus cruciger*. Its attribution to Trebizond has been contested, but since it is supported by the evidence of two hoards from the region and of isolated finds of single coins which have found their way into local collections, it seems assured. In view of their close resemblance to the coins of the successor states covered in this chapter, illustrations of two specimens are given for purposes of comparison [1282, 1283].

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# THE PALAEOLOGID DYNASTY, 1261–1453

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## General features

The final period of Byzantine coinage opened with the recapture of Constantinople in 1261. Its history and characteristics were in large measure determined by four factors: the progressive contraction in imperial territory, the importance of western coinage in the Aegean area, the complicated dynastic history of the two centuries between the accession of Michael VIII in 1259 and the death of Constantine XI in 1453, and the reversal of the roles traditionally played by gold and silver in the Byzantine and western economic systems respectively.

The first two of these factors cannot be separated from each other. When Michael VIII occupied Constantinople in 1261 the 'empire' of Nicaea included all north-western Asia Minor almost as far inland as Ankara together with the whole of Thrace, Macedonia, and Thessaly as far across as the frontier of Epirus. Half a century later the restored Empire had lost virtually all its possessions in Asia Minor to the Turks, but still held on to the greater part of its lands in the Balkans and in certain directions had extended them. Disaster came in the 1330s and 1340s. All its western possessions were conquered by the Serbian ruler Stephen Dushan, who in 1345 assumed the title of 'Emperor of the Serbs and Romans'. Only Thrace and a small area around Thessalonica were left in Byzantine hands. When the Serbian empire collapsed it was to the profit of the Turks, not the Byzantines, and by 1402, when Bayazid was defeated by Tamerlane, the Turks had overrun Thessalonica (1387) and the greater part of Thrace. During the last half-century of its existence the Byzantine Empire included no more than a small strip of land around the capital, some of the islands in the Aegean, and a substantial area of the Morea which had been acquired under Michael VIII. Even Thessalonica, recovered by the Byzantines in 1403, was lost again in 1423. It has been reckoned that in 1453 the population of Constantinople, which may have once reached a

million, was down to 50,000, and commercially the city was cast into the shade by its former suburb of Pera. A Byzantine author writing in the second quarter of the fourteenth century asserts that its customs revenue had by then sunk to 30,000 hyperpyra a year, as against the 200,000 hyperpyra collected by Genoese customs officials on the other side of the Golden Horn.

The area involved was consequently smaller than it had ever been before, and some parts of the Empire were not even geographically contiguous with the rest. The other rulers in the Aegean—the Frankish princes on the mainland of Greece, the Gattilusi in Lesbos and the Zaccaria and their Genoese successors who controlled Chios and Phocaea, the Venetians in the Negropont and the Archipelago, the knights of Rhodes in the extreme south-east—had their own systems of coinage. During the thirteenth and fourteenth centuries the south Serbian silver mines were at the height of their productivity, and from the late thirteenth century to the battle of Kossovo (1389) Serbian grossi modelled on those of Venice were struck in enormous quantities. The commercial influence of the Genoese at Pera and Chios and in the Black Sea and that of the Venetians throughout the area threw Byzantium completely into the shade. The Venetian gold ducat and silver grosso—later the soldino—were in general use, the Venetian ducat being widely imitated, while the eastern and southern Aegean areas were dominated by the silver gigliati of Naples-Provence and copies of them minted in the Levant. Such coinage as the Byzantine emperors still produced could not stand up to this competition. The striking of gold hyperpyra was abandoned in the middle of the fourteenth century, and Andronicus II paid the Venetian grosso the compliment of imitating it early in his reign. Though silver was struck in some quantity in the early fourteenth century and again at its close and in the early fifteenth century, the bulk of the coinage, down to the middle of the fourteenth century, was copper intended simply for local use.

The decline of Byzantine coinage can in large measure be attributed to commercial competition and the impoverishment of what remained of the Byzantine state, but another factor was involved whose influence is less easy to estimate and describe.

In the hundred years between 1250 and 1350 a gold coinage was introduced in most countries of western Europe, where silver monometallism had reigned unchallenged, outside the formerly Muslim and Byzantine areas in Spain and Italy, for over five centuries. Florence and Genoa introduced the gold *florino* and *genovino* almost simultaneously in 1252; the gold ducat of Venice followed in 1284; the *écu d'or* was created by St Louis in 1266 and a French gold coinage was abundant from the reign of Philip the Fair (1285–1314) onwards; the gold coinages of Provence, the Low Countries and the Rhineland date from the 1320s and 1330s; the Hungarian gold ducat was first struck in 1325; the English noble was introduced in 1344. The traditional gold coinages of Castile and the Regno were modernized, the *dobla* replacing the *alfonsino* and the *carlino d'oro* the *tari* and the *augustale*.

This new use of gold necessarily resulted in a modification in the commercial ratio between gold and silver. The West was prepared to pay more for gold than it had done before, so the ratio moved in favour of gold and it tended to be imported into Europe in

exchange for silver as well as goods. This at least was the broad trend; in practice the different western countries were involved in endless difficulties over problems of bimetallism, complicated in most of them by the existence of semi-token coinages of poor quality billon, so that the availability for coinage of one or other of the precious metals fluctuated from decade to decade. It is also not possible to treat the Byzantine Empire and Latin Christendom in relation to each other without taking account of their neighbours, for at this period the abundant gold coinages of North Africa and Egypt contrast equally with the silver-using economies of Persia and the Mongol world. In the present state of our knowledge one must limit oneself to the statement that the return to gold in the West had as one of its consequences the disappearance of gold at Byzantium without attempting to establish the precise connection between the two phenomena.

The monetary difficulties of the Byzantine government were intermittently aggravated by political complications, for almost from start to finish the Palaeologids were plagued by dynastic troubles. In place of coinages struck in the name of the reigning basileus alone, as had been customary in the twelfth and thirteenth centuries, or of rulers striking coins first alone and then in association with a successor, there are association coinages which owing to premature deaths or depositions did not carry over from one reign to another. A series of prolonged periods of civil war added to the confusion. These troubles were at their worst in the 1320s, during the last years of the reign of Andronicus II; in the 1340s and 1350s, during and immediately after the minority of John V; and in the 1370s and 1380s during the last two decades of the same ruler's reign. Outlying parts of the Empire, to complicate the picture further, were at times virtually semi-independent political units. The Byzantine possessions in the Morea formed the despotate of Mistra. Thessalonica had for eight years a communal government under Zealot rule and formed subsequently an appanage enjoyed in turn by Anna of Savoy, by Manuel II before his accession, and by John VII in 1403–8, after Manuel's return from the West.

The coinage of the period falls into three quite distinctive if partially overlapping phases. The first, which corresponds to the reign of Michael VIII and the early part of that of Andronicus II, continued the coinage of the Nicene period, with its debased gold hyperpyra, its exiguous issues of concave coins in silver, and its huge subsidiary coinage of copper trachea. It was succeeded by one in which the gold and copper trachea continued but the silver trachea were replaced by flat silver coins known as basilica and the former tetartera by flat copper coins which were known as assaria, the term applied in the New Testament to the smallest coins in circulation (Matt. 10:29, 'Are not two sparrows sold for an assarion?'). The second phase corresponds to most of the reign of Andronicus II, that of Andronicus III, and the first decades of that of John V. Finally, in the third phase, which lasted from the third quarter of the fourteenth century down to 1453, the external aspect of the coinage changed completely. The gold hyperpyron disappeared, to be replaced by a heavy silver coin, worth half an hyperpyron, which from the initial cross of its inscription was known as a stavraton. The new coin, the heaviest silver coin to be struck for regular use in the entire Byzantine

period, was accompanied by fractions, its half and its eighth, which took the place of the basilicon. The concave and large flat copper coins likewise disappeared, to be replaced by two denominations of small flat copper coins which Latin merchants in Constantinople termed *tornesi* and *follari*. In both the second and third phases the coinage incorporated many western features, which make it strikingly different in external appearance from the coinage of earlier centuries.

Despite these external changes the monetary system of the period remained in one respect unaltered. Accounts were kept throughout in terms of hyperpyra and carats, 24 carats to the hyperpyron. This is how an English ambassador who spent some months in Constantinople in November 1292 on his way to the Il-Khan court at Tabriz reckoned the expenditure of his household on food and lodging while in the city, and hyperpyra and carats were the monetary units still employed by the Venetian merchant Badoer for all his business in the late 1430s. It is true that the term *hyperpyron* had different meanings in the two cases, since in 1292 it was a coin of base gold and in 1436 a money of account based on silver, and a considerable difference in value, for in 1282 the Venetian ducat was reckoned at 2 hyperpyra 6 carats and in 1436 it stood at 3 hyperpyra 6 carats. This only meant, however, that the hyperpyron took part in the general enhancement of the value of gold, in terms of money of account, which was a feature of the later Middle Ages. The value of the Venetian ducat had risen in the same proportion in its home city, being valued at 80 Venetian soldi in 1382 and 110 in 1433.

Payments expressed in carats had to be made in actual coin, and the values attached to these changed greatly over the period. What is known of them may be summarized as follows.

#### PHASE I

According to Pachymeres, the gold hyperpyron was reduced in fineness from 14 to 12 carats, a figure borne out by modern analyses. It still weighed in theory 4.5 g, though in fact the weights are very irregular, varying from below 4 g to over 5 g, and Pegolotti notes that in fact it passed by weight. How the rare silver trachea and the subsidiary coins of copper were related to it is unknown.

#### PHASE II

The Florentine merchant Pegolotti, although writing *c.* 1340, summarizes the relationships that had obtained earlier in the fourteenth century. Although his text is at one point corrupt, two mutually incompatible figures being given for the ratio between the basilicon or grosso and the tornese, the most probable reconstruction of the relationship between the main denominations is as follows:

hyperpyron (AV)	basilicon (AR)	tornese (B)	stamenon (AE) (i.e. copper trachy)
1	12	96	384
	1	8	32
		1	4
			1

The ratio of 12 basilica to the hyperpyron, making the basilicon worth 2 carats like the old miliaresion, went back to the period of its creation and fluctuated a little according to the price of silver, falling commonly to  $12\frac{1}{2}$  or 13 to the hyperpyron, and even on occasion to 15. Although the weight of the basilicon was reduced in the 1330s from its original 2.2 g to about 1.25 g, the fineness of the gold hyperpyron had been reduced further to 11 carats, and the value of silver in relation to gold had appreciated considerably in Europe generally, resulting in the virtual suspension of the minting of the Venetian grosso under the successors of Pietro Gradenigo (d. 1311) and its ultimate replacement by two lighter coins, the half grosso or mezzanino of 16d. and the soldino of 12d. This lighter basilicon remained at the lower weight down to the 1350s and may have been intended as the equivalent of the mezzanino, created in or shortly before 1332.

### PHASE III

The value relationships of the final coinage system of the Empire and the various names given to the coins by westerners are known mainly from the immense account book of the Venetian merchant Giacomo Badoer, covering the years 1436–40. The basis of the system was the notional gold hyperpyron, worth 2 of the silver stavrata in actual use.

gold hyperpyron (24 carats)	silver stavraton (12 carats)	$\frac{1}{2}$ silver stavraton (6 carats)	$\frac{1}{8}$ silver stavraton ( $1\frac{1}{2}$ carats)	copper tornese ( $\frac{1}{8}$ carat)	copper follaro ( $\frac{1}{24}$ carat)
1	2	4	16	192	576
	1	2	8	96	288
		1	4	48	144
			1	12	36
				1	3
					1

The term *stavraton* for the silver half hyperpyron is found several times in a Thessalonican account book of the 1420s as well as in Badoer, and goes back to at least 1382. A still earlier reference, in an unpublished Turkish treaty of 1337, is at present unexplained. Either it

represents a subsequent gloss which was eventually incorporated into the text, or the coins we ascribe to Andronicus IV belong to Andronicus III and the stavraton was introduced half a century earlier than most scholars believe. Badoer's term *ducatello* for the one-eighth stavraton probably goes back to the 1330s, being applied first to the silver basilicon – a 'ducat' to Venetian merchants – after its weight had then been reduced. The Greek names for the tornese and the follaro are unknown. The weight of the silver hyperpyron fell, between its creation and the 1440s, from an original figure of *c.* 8.25 g to *c.* 7 g, and its fineness from about 950/1000 to about 900/1000, with the fractions following suit, but the value pattern probably remained unchanged.

The minting pattern, or rather what can be surmised regarding it, has to be seen in the context of the territorial changes that have been described above. Michael VIII and the two Andronici were still minting on a considerable scale, for their coins were required over a quite wide area, though the frequency of die links shows that mint output in particular years must often have been quite low. Coins of the second half of the fourteenth century are rare, and only found in a few areas, since with the contraction of the Empire after 1350 the need for imperial coins was greatly reduced. Coins of the final period of the Empire, or rather those of the reigns of Manuel II and John VIII, are today fairly common, in contrast to their rarity a hundred years ago, but this is a consequence of the discovery and subsequent dispersal of several large hoards found in or near Istanbul in the past few decades, not to Manuel II and John VIII having minted on a larger scale than John V.

Mints whose existence is certain, or for whose existence a good case can be made out, are four in number: Constantinople, Thessalonica, Philadelphia and Magnesia, though others may have existed from time to time. Constantinople was the chief mint, as in earlier centuries, and active throughout the period. Magnesia probably carried on briefly after 1261. Philadelphia must have been minting in the late thirteenth or early fourteenth century, for Pegolotti mentions *perperi di Filadelfia*, and may have minted later, for the city was isolated from the capital for many decades prior to its final surrender to the Turks in 1390 and would have found regular supplies of coins difficult to procure. Pegolotti's *perperi*, however, and any later putative issues, have so far defied identification.

Thessalonica was much more important. It was active through the reigns of Michael VIII and his two successors, as it had been in the thirteenth century, though its coins have in the main to be attributed on grounds of style and fabric. There are a few, it is true, which show types [e.g. 1373] that could not have been struck elsewhere, but over the others there is much uncertainty. All gold and silver coins are attributed, rightly or wrongly, to Constantinople, but the copper trachea seem to be fairly evenly divided between the two mints. Those of Thessalonica tend to be of neater workmanship than their Constantinopolitan counterparts; their lettering is better and they have thicker flans, with edges that sometimes have a more or less bevelled appearance. They often reproduce designs or themes already used at the mint during the Nicene period, and have a tendency to show the emperor holding large objects, such as a huge patriarchal cross or a lis of exaggerated dimensions. Impersonal obverse

types, such as a lis, a large flower, or a voided cross, also tend to be Thessalonican, while coins with a seated emperor are usually, though surprisingly in view of earlier occurrences of the type, Constantinopolitan. Thessalonican coins in the fourteenth century often include one or more stars in their designs. Part of the problem is that we do not know exactly how the two mints operated. Were the mint authorities at Thessalonica – and at Constantinople, for that matter – left free to decide the type of each issue, or were these expected, at any given moment, to be in some way related to each other?

For a few groups of coins the identification of Thessalonican issues is assisted by the evidence of hoards. The evidence regarding the trachea of Michael VIII and Andronicus II formerly in the Tommaso Bertelè collection and now at Dumbarton Oaks is less clear-cut than has been sometimes supposed. They have been attributed to one or more Thessalonican hoards, but at the time that his collection was being built up the importance of recording coin provenances was not always recognized and we do not in fact know where most of his coins were obtained. For the later period we are on firmer ground, with two hoards that were predominantly Thessalonican in character. One, published by Henry Longuet in 1960, was acquired at Thessalonica in the 1930s but lost in World War II, so that only illustrations and descriptions of the coins, but not their weights, are known. Longuet published it as containing 73 coins, with no fewer than 37 types, and dated it to *c.* 1360, but the number of types is greatly exaggerated. There are more coins of the reign of Andronicus II than he allowed, and the current view is that it should be pushed back some twenty years, so that it gives a very acceptable cross-section of the Thessalonican coinage of Andronicus III. The second and smaller hoard, from Pella, with only 8 coins, does not overlap in type with the contents of Longuet's hoard, but contains one very worn coin of similar fabric that can equally be attributed to Andronicus III's reign. Otherwise the coins all show an empress, sometimes identified by the letter A, which has led Bendall to attribute them to the years of Anna of Savoy's retirement to Thessalonica after 1352.

Whether any coins can be attributed to Thessalonica after Anna's death is uncertain. The city was governed by the future emperor Manuel II from 1382 to 1387, and since he already had the imperial title and had been formally crowned he might well have minted, but the one coin attributed to him by Bendall is, in the absence of an assured provenance, far from certain. The city was surrendered to the Turks in 1387, since it was virtually defenceless and Manuel wished to spare its inhabitants the sack that would have followed its forcible capture. It was recovered in 1403, after the Turkish defeat at Ankara, and it then remained Byzantine to 1423, when it was ceded to the Venetians in the hope of at least retaining it for Christendom. Its defence in the end proved impossible, and in 1430 it was captured by Murad II. There is no evidence of the existence of a mint in the city during these final decades.

The types of Palaeologid coinage require little comment. The silver and billon coins, and occasionally those of copper, show strong western influence, with a cross and an accompanying inscription in large letters playing a conspicuous role. The basilicon was inspired by the Venetian grosso, and the double circle of inscription of the silver hyperpyron derived



ultimately from the design of the *gros tournois*. But the gold and much of the copper remained fundamentally Byzantine in type. Christ and the saints form the main religious types, with the image of the Virgin within the walls of Constantinople, used particularly on the gold hyperpyron, as an important novelty. The emperors are frequently shown standing beside Christ, the Virgin, or St Demetrius, and for some time there was a return to the practice of showing two associated emperors standing together. An unusual variant is a standing figure of Andronicus II in company with the Old Testament prophet Ahijah. The theme of the winged emperor continued to be sometimes exploited, and the fleur-de-lis remained in use even though St Tryphon must have bulked less large in the imagination of Constantinople and Thessalonica than in that of Nicaea. Novelties are a kneeling emperor being presented to Christ and a figure of Christ blessing imperial colleagues.

An unusual secular reverse type of some assaria of Andronicus II and his successor is an indictional date in the shape of a large N followed by a numeral [e.g. 1491], the letter forms being in the cursive script of the day and not in the capitals used for numerals in the sixth and seventh centuries. Also sometimes used is the Palaeologid monogram, formed from the four letters, Π, Α, Λ and Γ, which occurs also on late Byzantine pottery, clothing and metalwork. A cross with four Bs in the quarters, which also forms a reverse type, is likewise a Palaeologid symbol, being found on banners and forming part of the arms of the Palaeologid family which came to rule the Italian county of Montferrat in the fourteenth century. The four Bs stood originally for *basilius basileon*, 'king of kings', repeated for reasons of symmetry, but like the same letters in western heraldry, notably in the arms of Burgundy, the B came to be identified with a tinderbox, which had this form in the Middle Ages. The double-headed eagle, on the other hand, though a familiar Palaeologid symbol in other forms of art, is rare on the coins, though it does occur. It plays a much more conspicuous role in the coinage of the Genoese family of the Gattilusi, lords of Mytilene, who were anxious to underline their Palaeologid descent.

## The emperors and their coins

The coinage of the period is most conveniently described under the headings of denominations, but it is necessary first to outline the history of succeeding reigns and the denominations struck during them. The *politikon* coinage is best dealt with separately (p. 313).

The list of emperors is as follows, all save John VI and his son Matthew being of the Palaeologid house, and their relationships are set out in the accompanying genealogical table.

Michael VIII	1259–82	(at Constantinople from 1261)
Andronicus II	1282–1328	(associated from 1272; reigned nominally to his death in 1332)

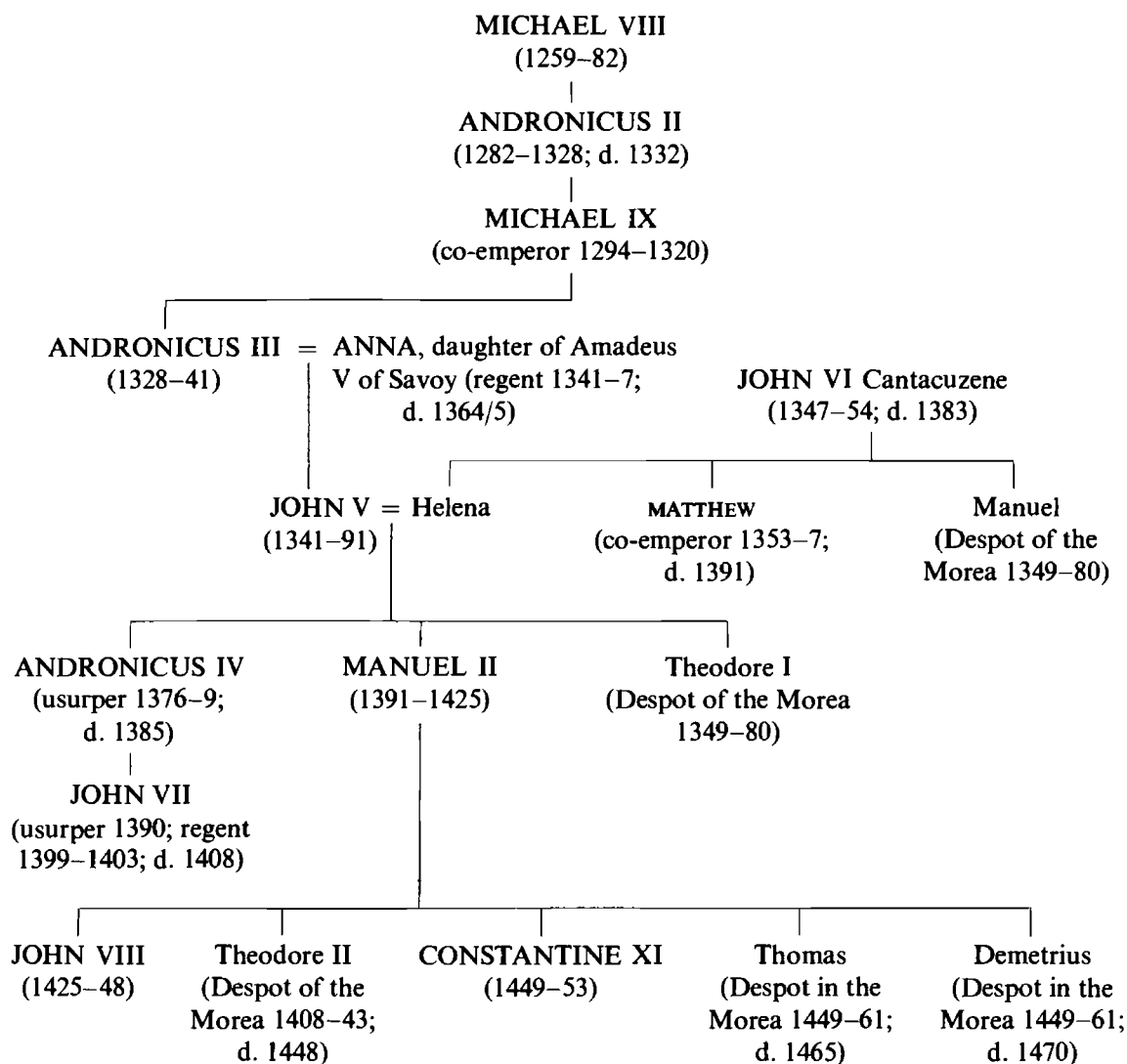
Michael IX	1294–1320	(associated on coins with his father)
Andronicus III	1328–41	(intermittently recognized as co-emperor from 1320 onwards)
John V	1341–91	
Anna of Savoy, regent	1341–7	(empress-dowager in Thessalonica 1352– <i>c.</i> 1360)
John VI Cantacuzene	1347–54	(proclaimed emperor 1341, crowned 1346, occupied Constantinople 1347; deposed 1354; died 1383; minted both in association with John V and alone)
Matthew Cantacuzene	1353–7	(abdicated 1357, died 1391)
Andronicus IV	1376–9	(usurper, but minted coins; died 1385)
John VII	1390	(usurper; minting in 1390 unlikely)
Manuel II	1391–1425	(associated from 1373; emperor in Thessalonica 1383–7)
John VII again, regent	1390–1403	(co-emperor in Thessalonica 1403–8)
John VIII	1425–48	(associated from 1421)
Constantine XI	1449–53	

#### MICHAEL VIII, 1259–82 (AT CONSTANTINOPLE FROM 1261)

Michael VIII's reign falls into two very unequal periods, the two years prior to his recovery of Constantinople and the twenty-one years that followed. His son Andronicus II was recognized as co-emperor as early as 1261, perhaps even from 1259, though he was not crowned until his marriage in 1272. Michael followed the custom established by Alexius I of not associating the heir to the throne on the coinage in a regular fashion, but only at the time of the boy's coronation and on a few occasions subsequently. The coronation issues, which so far as we know were limited to copper trachea, show the two kneeling emperors blessed by St Michael, and have on the obverse of the Constantinopolitan issues a bust of St Nicolas [1365], on those of Thessalonica, one of St Theodore [1390]. They are anomalous in that they appear to give Andronicus the place of honour on the right, but this was due to Christ or St Michael being treated as a third person actually present.

Michael's three mints were Magnesia (at least to 1261), Constantinople (from 1261), and Thessalonica. His denominations were the four traditional ones. Those of the period 1259–61 have been described already (p. 253), apart from the issues of Thessalonica, which are best treated as part of the continuous production of this mint (pp. 303–4). After 1261 he struck two types of hyperpyra (pp. 291–2), the first rare and the second common, and several types of silver trachy (p. 295), all but one being extremely rare. The 'copper' trachea run to dozens of types (pp. 302–3), and with the gold made up the bulk of the circulating medium. Only a single type of tetarteron, however, is known (p. 310).

Table 19 The Palaeologid dynasty



ANDRONICUS II, 1282–1328 (WITH MICHAEL IX, 1294–1320;  
WITH ANDRONICUS III, 1325–8)

Andronicus succeeded his father in 1282, and his son Michael (IX), already accepted as co-emperor in 1281, was crowned in 1294. He died, before his father, in 1320. His own son Andronicus (III) had been recognized as co-emperor in 1317, but Andronicus II blamed him for Michael's death and tried to eliminate him from the succession. Andronicus III raised a rebellion in Thrace, where he was proclaimed autokrator in early 1321, and in June the rivals

agreed to a partition of power, Andronicus II to rule from Constantinople and his grandson from Adrianople. A further outbreak of civil war occurred in 1322, followed by a fresh settlement, and in 1325 Andronicus III was formally crowned. In 1327 he again revolted, and this time deposed his grandfather (1328), who was, however, left in possession of quarters in the palace and the use of the royal ornaments. In 1330 he was compelled to become a monk, and in 1332 he died.

There are a number of problems with the coinage. One is that of deciding whether coins of an Andronicus and a Michael are of Michael VIII with Andronicus II, or of Andronicus II with Michael IX. A second is that of distinguishing coins of Andronicus II alone from those of Andronicus III, who also ruled without a colleague. A third is that of attributing the coins of Andronicus II to the correct periods in his reign and of estimating the likelihood of some elements in the coinage being continued beyond 1328, and even beyond 1332. Yet another is that of deciding how much of the anonymous religious coinage was struck under Andronicus II.

The first problem chiefly arises in connection with flat copper coins having on each side a standing emperor; they are in fact best attributed to Andronicus II and Michael IX. The second arises over coins in all three metals, but the real uncertainties are over the billon, where it seems that many of the coins currently ascribed to Andronicus II really belong to Andronicus III. Thirdly, in Andronicus II's reign, there are coins of Andronicus II alone, of Andronicus II in association with Michael IX, and of Andronicus II in association with Andronicus III, for Andronicus II broke with the tradition of the previous two centuries in accepting the presence of his heir on the coinage. The problem is that of dating them. It seems certain that all the gold and silver in the name of Andronicus II alone belong to 1282–94, and that although from his point of view he was again sole ruler for more than one period after 1320, he did not recommence minting in his name alone in the 1320s. Trachea in the name of Andronicus II alone may on the other hand have been struck at any time during the reign. Coins of Andronicus II and Michael IX belong primarily to the years 1294–1320, but since Andronicus did not recommence minting in his name only, some of them presumably continued until 1325. From that date onwards the coinage becomes one of Andronicus II and III, and it seems likely that it continued beyond 1328, certainly down to 1332 and probably even later.

The coinage of the long reign is in any case extremely abundant. The hyperpyra (pp. 291–2) and the copper trachea (pp. 304–8) remained traditional in pattern, but the silver (pp. 295–8) and the flat copper coinage (pp. 310–12) underwent a reform which was also in large measure a westernization. In effect, the rarely struck silver trachy and the tetarteron were abolished and replaced, in one case by a new silver coin modelled on the Venetian grosso and its equal in value, and in the other by a flat coin almost western in appearance which was known to Italian merchants by the old term *stamenon*. The new coin pattern thus created was to last for half a century.

## ANDRONICUS III, 1328–41 (CO-EMPEROR WITH INTERRUPTIONS FROM 1317)

The early history of Andronicus III has been described. He was effectively sole ruler from 1328, and in name as well as in reality from 1332. He died unexpectedly in June 1341, in his forty-fifth year, after only a few days of illness. Although the succession of John V, the oldest of his three sons, was never in question, there had seemed no need to create him co-emperor, and he was not in fact crowned until 19 November 1341. The fact is important, for there exist a number of coins on which father and son are associated with each other, usually with the empress Anna as well, and there has been much discussion as to whether they were struck during Andronicus III's lifetime or after his death. The latter must in fact have been the case. Andronicus III seems not to have minted gold in his own name at all, and his *basilica* (p. 299), *trachea* (pp. 208–9) and *assaria* (p. 312) are not always easy to distinguish from those of his father.

JOHN V, 1341–91 (WITH ANNA AS REGENT, 1341–7; WITH JOHN VI CANTACUZENE, 1347–53; ALONE 1353–91, INTERRUPTED BY THE USURPATIONS OF JOHN VI IN 1353–4 AND ANDRONICUS IV IN 1376–9, AND FORMALLY IN ASSOCIATION WITH HIS SON MANUEL II FROM 1373)

The reign of John V was one of the longest in Byzantine history, but unlike those of Constantine VII and Basil II its coinage is very inadequately known. Although many coin types were struck in its early years, only a few have survived in any quantity, and the rarity of hoards, despite the highly disturbed political situation, implies minting on a very limited scale. Much, no doubt, still remains to be discovered, particularly for the two decades between the abdication of John VI in 1354 and the usurpation of Andronicus IV in 1376.

As had occurred in the comparable reign of Constantine VII, and indeed of that of Basil II if this be reckoned from his father's death in 963, there are several joint coinages and coinages on which successful usurpers appear alone. John V may have been less a nonentity than is commonly supposed, but he came to the throne as a minor and his inability to halt the manifest decline in imperial power did nothing to enhance his authority. His reign can for numismatic purposes be divided into six periods.

(I) 1341–7. Minority, with John V normally shown on the coins in company with his mother. The regent Anna of Savoy is depicted by a contemporary historian as impulsive, greedy and only moderately intelligent, and seems to have been almost totally lacking in political prudence or good sense. While Constantinople remained throughout in John V's hands, a running civil war persisted over most of the period in the provinces with the adherents of John VI Cantacuzene, a trusted adviser of Andronicus III proclaimed emperor by his supporters in October 1341. In February 1347 John VI occupied Constantinople. The coinage of the minority consisted mainly of silver *basilica* of reduced weight (pp. 299–300), with rare *hyperpyra* (p. 293) and *assaria* (p. 309).

(II) 1347–53. Joint reign of John V and John VI, the later stages seeing a second outbreak of civil war, with John VI this time in possession of the capital and John V at Thessalonica. On the joint coinage of John V and John VI the former is punctiliously accorded the place of honour, and Anna no longer appears. Known coins are mainly basilica or their fractions (p. 300) and assaria.

(III) 1353–4. John VI minting in his name alone, at Constantinople, down to his surrender on 24 November 1354 and his abdication a few days later. His only known coins are silver basilica (p. 300). John V's capital was Thessalonica, but no coins have been assigned to this period.

(IVa) 1354–76. John V alone, at Constantinople. The only coins known for this period are a copper trachy (p. 309) and perhaps some of the politikon coinage (pp. 313–14).

(IVb) 1352–1364/5. Coinage of copper assaria (pp. 312–13) struck jointly by John V and Anna at Thessalonica, which she possessed for some time as an appanage, have been assigned to this period.

(V) 1376–9. Usurpation of John V's son Andronicus IV. His coins, which appear to have opened the final phase of Byzantine coinage based on the silver hyperpyron, are referred to below.

(VI) 1379–91. Coinage of John V, restored. This (pp. 316–17) follows the same pattern as that of Andronicus IV.

#### ANDRONICUS IV, 1376–9

Andronicus IV's reign was technically a usurpation. As John V's eldest surviving son he had formally been treated as the emperor's destined successor since the 1350s and had acted as regent on several occasions, but his repeated treachery and conspiracy eventually resulted (1373) in his imprisonment and blinding. This operation was so incompetently carried out that he remained able to see, and in 1376 he carried out a *coup d'état* and occupied Constantinople. In 1379 John V recovered both his freedom and the capital, and in 1381 father and son reached an agreement by which Andronicus was restored as heir presumptive and given as an appanage a small area round Selymbria, north of the Sea of Marmora, where he died in 1385. His rare coins (pp. 315–16) probably all belong to the years 1376–9.

#### MANUEL II, 1391–1425 (CO-EMPEROR FROM 1373)

Manuel II, John V's second son, was crowned co-emperor in 1373 in place of his elder brother Andronicus IV. The history of his long reign, if the full period from 1373 down to his death in 1425 is taken into account, is of extreme complexity, and some of the details seem to have affected the issue of coin. The main phases were four.

(1) At Thessalonica, 1373–6, 1382–7. Manuel seems to have been put in charge of Thessalonica in c. 1369, though in what capacity is uncertain. He was basileus from 1373. In

1376 he was imprisoned by Andronicus IV in company with his father, but he was again placed in charge of Thessalonica in 1382 and ruled there again as emperor for five years, until in 1387 he was forced to surrender the city to the Turks. No coins can be certainly ascribed to this period, though some may have been struck.

(2) At Constantinople, alone, 1391–9.

(3) At Constantinople, 1399–1403, with Andronicus IV's son John VII as co-emperor and regent during his absence in western Europe, where he was attempting to secure the support of Latin Christendom against the Turks. John VII, who had the full imperial title, minted during these three years in his own name. His coins duplicate some of the types of Manuel's, and it is possible that they were concurrent issues, but it is equally possible that John was continuing the latter's types and that issues in Manuel's name were suspended during these years.

(4) At Constantinople, alone, 1403–23. John VII lived until 1408, and Manuel's own son John VIII was associated co-emperor in 1421, but there seem to be no joint issues with either ruler.

Manuel's coinage consists of three denominations of silver (pp. 316–17) and two of copper coins (pp. 317–18), the silver forming both a heavy series and a light one. The date at which the weight reduction took place is uncertain. Very base gold hyperpyra in Manuel's name also exist but are probably eighteenth- or early nineteenth-century forgeries.

#### JOHN VII, 1390; 1399–1402; AT THESSALONICA, 1403–8

John VII's career is likewise a complicated one. He was associated with his father Andronicus IV in 1376–9, but whether he was actually created co-emperor is a matter on which our authorities differ. In 1390, with Turkish support, he made himself briefly master of Constantinople (14 April–17 September), and between 1399 and 1403 he was effective emperor during Manuel's absence in Europe. After Manuel's return, for reasons unknown, he was briefly exiled to Lemnos, but before the end of the year he was appointed governor of Thessalonica with the curious title of 'Emperor of all Thessaly'. He died in 1408.

No coins have been attributed to John VII's brief usurpation in 1390, and only some rare half stavrata, with a facing bust and St Demetrius on horseback, have been credited to 1399–1403. It is more likely that these belong to John V (p. 316), and that John VI struck other types of silver and copper that are customarily divided between John V and John VIII (pp. 317–18).

#### JOHN VIII, 1425–48

Manuel's son John, co-emperor since 1421, was to rule for twenty-three years over the small area which was now all that remained of the Empire. His reign was an almost uninterrupted series of national and personal misfortunes. Thessalonica fell finally under Turkish rule in

1430. The emperor's attempts to win aid from the West resulted only in the disastrous Crusade of 1443/4. The Morea was devastated in 1446 and its despots forced to become Turkish vassals. The emperor's concessions to the Pope only embroiled him with his subjects. One of his three successive wives deserted him on grounds of ill-treatment, the two others predeceased him, and his last years were embittered by quarrels with three of his too numerous brothers over the succession. His coins, which are common (pp. 316–17), are of the same types and denominations as those of his father, but the striking is more slovenly and the weights of the hyperpyra fell by the end of the reign to 6.5 g or even less. Their only redeeming feature is that they were still of good silver, for even if some coins show a falling-off from those of Manuel they were still over 900/1000 fine.

#### CONSTANTINE XI, 1448–53

John VII's younger brother Constantine was in the Morea at the time of his death and did not reach the capital until March 1449, after being crowned at Mistra in January. Two writers present at the siege of 1453, Nicolò Barbaro and Leonard of Chios, archbishop of Mytilene, refer to his minting coin in order to pay the troops engaged in the city's defence, both of them alleging that as a desperate measure he used gold and silver from Church treasures for the purpose. No gold coins are known, but a silver half stavraton weighing 2.89 g, of the same type as those of John VIII but with the clear reading +KΘNCT///ΑΛ, came to light some years ago and other denominations may yet be found.

### Gold coinage

The gold coinage consisted entirely of hyperpyra, apart from the dubious 'florin' of John V.

The rare hyperpyron of Michael VIII attributable to the period before his occupation of Constantinople has already been described (p. 253). Two classes of coin were struck after 1261, each having on the obverse a representation of the Virgin and on the reverse the kneeling figure of the emperor being presented by his name-saint, the archangel Michael, to a seated Christ. On Class I the obverse design is traditional, with the Virgin seated on a high-backed throne holding a medallion of Christ on her lap. The few known specimens of the coin, which was evidently struck only briefly, show the throne decorated with either two saltires and pellets [1287] or with two kappas. Class II has a quite new obverse design. This shows a half-figure of the Virgin *orans* within the city of Constantinople, which is schematically represented by a circle of walls broken by six towers seen in perspective, so that the lower three face inwards and the upper three outwards. There are two main varieties, differing according to whether Christ holds a scroll [1288], as he does on coins of Class I, or a book [1289]. Over fifty different privy marks have been recorded. They take the form of



symbols, groups of pellets, or more often letters placed in various positions in the obverse field, and sometimes in that of the reverse as well. The coins illustrated show in one case a group of three pellets on each side of the uppermost tower and on the reverse a star, in the other two kappas on either side of the bottom tower – this is the commonest position – and nothing on the reverse.

The novelty of the hyperpyron designs caught people's attention at the time, and often puzzled them. Pachymeres remarks on the figure of the Virgin within the walls, a type explained by the fact that her image at Blachernae was one of the chief palladia of the city, while Pegolotti describes the reverse as showing a figure 'with its head on its breast'. The emperor's head is in fact on the level of the archangel's breast, which gave rise to this misunderstanding. Pachymeres says that the coin was reduced in fineness from 16 to 15 carats, because of the emperor's heavy expenses towards the Italians, i.e. in subventions to allies against Charles of Anjou, especially in connection with the Sicilian Vespers. Pegolotti gives the fineness as  $15\frac{1}{2}$  carats, which is fairly well borne out by modern analyses.

Andronicus II's hyperpyra are also of two types, both of them common. One shows Andronicus alone kneeling before Christ, the other shows him with a co-emperor, first Michael IX and subsequently Andronicus III. They can be broken down further according to whether the kneeling figure is nimbate or not and according to whether the walls of Constantinople are shown with six towers, as they had been under Michael VIII, or with four. Further reductions in fineness took place during the reign. Pegolotti declares that the 'kneeler' hyperpyra (*inginocchiati*) were of 14-carat gold, while 'the old ones with three saints', i.e. those showing Christ blessing Andronicus and Michael – such misunderstandings of coin designs are common in the literary sources – were of  $13\frac{1}{2}$  carats. Pachymeres, writing in c. 1308, says that Andronicus reduced the fineness from 16 to 15 carats at the beginning of his reign, and subsequently to 12 carats, and modern analyses indicate that the last figure is about correct. The weights are very irregular, as is often the case with debased coins, ranging from c. 2.5 g to c. 6 g, but usually fall between 3.5 and 4 g. The coins are in general well preserved, apart from frequent clipping, but the details are often hard to make out because of careless striking. A bewildering variety of privy marks occur, normally on the obverse but in earlier issues on the reverse as well.

The order of issue has been much discussed, and should be clear from the relatively abundant hoard evidence, but neither of the two large hoards from Constantinople itself was preserved intact and the information regarding ten Bulgarian hoards dating from the 1320s–1340s was so carelessly compiled that most of it is useless. A probable sequence is set out in the table on p. 292, although the precise dates suggested are no more than approximate. For details of the privy marks, reference must be made to Veglery and Millas' article of 1973–4. The coins illustrated on Pl. 81 show something of their complexity, that of Class Ia having  $\Lambda\Lambda$  in the lower field and two lis in the upper circular wall of the obverse, and the other of Class Ib having two groups of four pellets in the lower field and BX in the upper circular wall.

Class	Obverse type	Reverse type	Approximate dates
Ia	Virgin within walls; 6 groups of towers [1290]	Emp., nimbate, <i>crouching</i> before Christ	1282–c. 1290
Ib	Same [1291]	Same, but emp. without nimbus	c. 1290–4
Ila	Same [1292]	Christ blessing the <i>kneeling</i> figures of A.II and M.IX	1294–c. 1310
Ilb	Same, but with 4 groups of towers [1293]	Same	c. 1310–25
III	Same, 4 groups of towers [1294]	Same, but A.III (bearded) replaces M.IX	1325–8 and later

The types of Class I derive from those of Michael VIII's hyperpyra. The obverse is unchanged, though less carefully rendered, with the MP and ΘV beside the Virgin's head usually reduced to a few pellets. The reverse is an ill-conceived development of Michael VIII's type, but without the archangel, for Andronicus II had no equally distinguished name-saint. The design of the crouching emperor exaggerates, perhaps deliberately, his abasement before the Godhead.

It has been suggested that the coins should be divided between Andronicus II's two periods of sole rule (1282–94, 1320–5) and the reign of Andronicus III (1328–41), but all have six groups of towers and the hoard evidence is decisively against it: the coins are all of 1282–94. Those of Class Ia are of poor style, with the emperor's costume summarily depicted and his head thrown back at an impossible angle; the inscriptions usually contain elements of the formula ΕΝ ΧΩ ΤΩ ΘΩ ΠΙCΤΟC, with *basileus* sometimes substituted for *despotes*, and the lettering is poor. Those of Class Ib are of much better style, with the inscription usually reduced to the essential elements of ΑΝΔΡΟΝΙΚΟC ΔΕCΠΟΤΙC Ο ΠΑΔΑΙΟΔΟΓΟC, though one group of coins has, almost in full, ΑΝΔΡΟΝΙΚΟC ΕΝ Χ[ΠΙCΤ]Ω ΤΩ ΘΕΩ ΠΙCΤΟC ΒΑCΙΑΕΥC ΚΑΙ ΑΥΤΟΚΡΑΤΩΡ ΚΟΜΝΗΝΟC Ο ΠΑΔΑΙΟΔΟΓΟC, the fullest imperial title that ever occurs on a Byzantine coin. Although it has been argued that the order of issue is the reverse of that given here, it seems plain that Ia is not a degenerate form of Ib but that the latter is a basically redesigned type, which should be placed second. The date when one replaced the other is unknown, but Class Ia is much commoner, with a greater variety of privy marks, and c. 1290 seems the best estimate.

Class II continues the obverse of Class I, but some half-way through the issue the number of groups of towers was reduced from six to four, perhaps in the hope of accommodating more satisfactorily the complexities of the privy marks, which are now confined to the obverse. The reverse type is a standing figure of Christ crowning the kneeling emperors, Andronicus on the left and Michael on the right. Michael is normally beardless, but on the latest issues he is sometimes shown with a moustache. Occasionally the positions of the two emperors are

reversed, but this is no more than a die-sinker's error without political overtones. Since the inscriptions are for the most part illegible and the details of the figures hard to make out, it is often difficult to distinguish coins of Andronicus II and Michael from those of the two Andronici, so that hoard descriptions, especially the older ones before the existence of coins of the two Andronici was known, have to be regarded with caution. The date when the six towers were replaced by four is unknown: *c.* 1310 is simply a round number which cannot be far wrong.

Coins of Class III are of the same types as those of Class IIb, but the reverse inscription, which normally follows the circumference, has the name of Andronicus, more or less garbled, on both left and right. The figure on the right, i.e. Andronicus III, has always a forked beard. The two emperors are always shown three-quarter length, though in theory they are kneeling. The class was presumably first struck in 1325, but it is hard to say when it ended. At least fourteen privy marks are known, so it can scarcely have ended in 1328. Probably it went on being struck well into the reign of Andronicus III (1328–41), and perhaps continued throughout it. Such a conclusion is justified in part by the absence of any hyperpyra bearing the name or effigy of Andronicus III alone – there were none in two substantial Bulgarian hoards of the 1340s – in part by the fact that two of the complex privy marks found on them occur also on basilica of Andronicus III's sole reign, suggesting that they were contemporary issues. If our knowledge of Andronicus III's silver coinage were more complete there might be other examples of such overlapping. A continuation of the three-figure type after 1328 must inevitably appear strange in view of the long hostility between the two Andronici, but the type had already continued after Michael IX's death in 1320 and was one to which people were accustomed – no other had been struck, in 1325, for over thirty years – and the fact that Andronicus II lived on until 1332 would have made it less strange.

The next type of hyperpyron for whose existence we have positive evidence is in fact one having on the obverse the standing figures of Anna and Andronicus III and on the reverse a kneeling figure of John V crowned by a standing Christ [1295]. There has been much debate as to whether it is a coin of Andronicus III's reign, issued shortly before the emperor's death, or whether it is a coin of John V's minority with the representation of Andronicus III a posthumous one. It seems likely that the latter is the correct view. There is no good reason to believe that John was created basileus before his father's death, which was quite unanticipated, and Anna's presence on the coin is explicable only through her being regent at the time it was issued. The obverse type was arrived at by simply omitting the right-hand figure of the old three-figure design showing Christ and the two Andronici.

This rare hyperpyron of 1341–7 was succeeded by a still rarer one of John V and John VI [1296] struck between 1347 and 1352. The obverse was once again the Virgin within the walls of Constantinople and the type reverted to that of Christ blessing two emperors, whose names take the barely legible form of  $\text{I}\Theta\text{ENX}\Theta$  ('John, in Christ . . .'). The coins are heavily

debased, very roughly struck, and extremely irregular in weight. The issue probably lasted over several years, for four varieties of privy mark have been recorded and the coins are so rare that more may yet come to light.

With these hyperpyra of John V and John VI the gold coinage of Byzantium, for all practical purposes, came to an end. Two coins which purport to be later in date exist, but their authenticity is open to doubt.

The earlier of them is a gold 'florin' of John V, of which there is a unique specimen in Paris [1297]. The obverse shows the standing figure of St John copied from that of a Florentine gold coin, the reverse a standing figure of the emperor, with columnar inscriptions giving the saint's name and title (ὁ Πρόδρομος, 'the Forerunner') and the other those of the emperor. The coin is flat and of fine gold, but weighs only 1.88 g, little more than half that of the true florin but approximating to the pure gold equivalent of the debased hyperpyron of the mid-fourteenth century. (A text of 1251 equates 37 hyperpyra with 20 ducats.) Opinions on its authenticity differ. The issue of a coin with the image of St John would be natural for an emperor bearing the same name, and western types were by that time no novelty in Byzantine coinage, but if the coin were intended for domestic use one would expect it to have been more traditional in type and if for international circulation to have been the same weight as the florin.

The other coin is a hyperpyron of Manuel II of very base gold having the Virgin within the city walls on one face and a standing figure of the emperor on the other [1298]. Four specimens are known, but all are from the same pair of dies, and although they have usually been published without comment their style and lettering leaves one sceptical of the possibility of their representing an attempt, as late as the reign of Manuel II, to revive a coinage of gold hyperpyra. John V's 'florin', on the other hand, can perhaps be given the benefit of the doubt, but its extreme rarity suggests that it can have had no more than a limited circulation. Byzantine gold coinage had effectively ended by 1350.

## Silver trachea and basilica

The silver coinage of the early Palaeologid period is initially (1261–c. 1294) one of concave trachea and subsequently (c. 1294–1354 or later) one of flat basilica and occasional silver or billon. They differ completely from each other, and can be treated as distinct entities. The first forms part of the traditional Byzantine pattern, its silver coinage being a survival of the electrum third-hyperpyron of the Comnenid period. The second was inspired by the widespread circulation in the Aegean area of the silver 'ducat' of Venice.

The early silver trachea are all of a single denomination, weighing between 1.5 g and 2 g, and continuing with a variety of types the similar issues of the Empire of Nicaea. Their concave fabric suggests that, like the Nicene issues before them, they were theoretically of electrum and overvalued in relation to the hyperpyron, though their actual value is un-

known. All, with one exception (A), are of extreme rarity, only one or two specimens being known of each type. The coins probably represent annual issues, so that further types will come to light in due course to fill up the years of the reign, and their rarity is due to most having been melted down to provide the silver for the basilicon coinage of Andronicus II.

Thirteen types of such coins are known of Michael VIII in addition to those already listed (see p. 253) as Magnesians and struck before 1261. For knowledge of several of those in the following list I am indebted to Mr Bendall, as they are unpublished at the time of writing.

- A. Virgin seated./St Michael presenting emp. to Christ. [1301]
- B. Bust of Christ Emmanuel between K and X./As last.
- C. Virgin standing./Emp. crowned by Christ. [1302]
- D. Empty throne (*Hetoimasia*)./Emp. and military saint holding standard. [1303]
- E. Seraph./Emp. standing between B and G.
- F. Half-length figure of St Michael./Emp. crowned by Christ.
- G. Half-length figure of the Virgin between A and K./Emp. crowned by Christ.
- H. Virgin seated./Emp. seated.
- I. Virgin seated, C Δ on throne./Emp. standing.
- J. Virgin seated, BB on throne./Emp. crowned by St Michael.
- K. St Nicolas standing./Christ above Michael VIII and Andronicus II.
- L. St George standing./St Michael blessing Michael VIII and Andronicus II.
- M. St Tryphon standing./Emp. and St Demetrius holding long cross.

The order of the issue is unknown, but A, which reproduces the types of Class I of the hyperpyron, presumably dates from 1261, and K and L must be later than 1271. Type D has a most unusual obverse, the 'empty' throne furnished with the instruments of the Passion prepared for the Second Coming of Christ. Its appearance on silver and copper trachea (see p. 302) possibly alludes to the Council of Lyons in 1274, when Acropolites in the emperor's name accepted the Union of the Churches, since such a throne, intended to represent the presence of Christ at conciliar deliberations, is often associated with their representation in art.

The silver trachy did not end with Michael VIII, for one specimen of Andronicus II's reign has survived. It is a coin in Bendall's collection having on the obverse a bust of Christ and on the reverse the standing figures of Andronicus and Michael IX holding a long cross. The initial letters of Andronicus' and Michael's names are legible to the left and right. It was probably struck on the occasion of Michael IX's coronation in 1294, and it is the last silver trachy that is known.

The silver basilicon and its fractions represent Andronicus II's major monetary innovation. The basilicon itself was of the same weight and fineness as the Venetian grosso, and resembled this sufficiently for it to be possible for the two to circulate interchangeably. The grosso – contemporaries called it a ducat, though in modern usage this term is reserved for the Venetian gold coins – had on one face the figure of Christ seated on a high-backed throne,

and this was initially copied very closely, though subsequently a low-backed throne, perhaps suggested by the design of the one-third miliaresion of Michael VII [974], was substituted for it. The grosso had on the other side the standing figures of the doge and St Mark holding a banner, while its Byzantine equivalent showed the standing figures of Andronicus and his son holding initially a patriarchal cross, subsequently a cross and globus cruciger respectively, and ultimately a labarum. The name given to the coin was based on that of its Venetian prototype, for just as the grosso was at the time called a ducatus, being the coin of the doge of Venice, so the Byzantine was called a basilikon, as being the silver coin of the basileus. Sometimes, however, it is called a dukaton, or an argyron or an asper, or even a trikephalon. Its introduction was accompanied by a great extension in the use of silver, which since the tenth century had played only a minor monetary role in Byzantium.

The date of its introduction is not certain. Protonotarios has suggested that it was 1295 (*rectè* 1294), since the earliest issue gives Michael IX the place of honour on the left and the most likely occasion for such an inversion of protocol would have been the boy's coronation. The difficulty with this hypothesis is that, as has just been seen, the old-fashioned silver trachy was still being struck as late as 1294. Possibly it was the issue of this that suggested the desirability of a change, and the basilikon dates from later in the same year. Its first mention in Greek occurs in an undated letter of the patriarch Athanasius I (1303–11), and Muntaner describes Andronicus II paying debased basilica to the Catalans in the autumn of 1304. Pegolotti gives the fineness of the *basilei di Romania fatti a modo di viniziani* as 11 oz 8 d., i.e. 944/1000, virtually the same as that of the Venetian grosso. The silver-gold ratio of the time suggests that it was intended that 12 should have been reckoned to the hyperpyron, giving it the value of the old miliaresion as a unit of account, and contemporary texts show it in fact fluctuating at figures between 12 and 15. No debased basilica of the kind described by Muntaner have so far come to light.

Andronicus II's basilica fall into three groups according to whether he is associated with Michael IX, with the prophet Ahijah or with Andronicus III, though two anonymous 'religious' types can also be ascribed to the 1320s. The earliest issues of Andronicus and Michael, which give the names of the two emperors, are very rare, and must be regarded as more or less experimental in character. The type was eventually stabilized with the impersonal inscription *Autokratores Romaion*, mentioning neither emperor by name, and this is the only common one in the series. There is some use of privy marks, which take the form of two pellets, two globules, two stars, two stars and two pellets, or two Ts in the obverse field above Christ's throne, and on the latest coins Michael IX is shown with a moustache.

Sometime in the 1320s the *Autokratores Romaion* series was apparently replaced by a coin showing Andronicus II in company with the prophet Ahijah (Ο ΠΡΟΦΗΤΗΣ ΑΧ.), who in the first Book of Kings (11:29 ff.) is represented as dramatically foretelling the separation of the kingdoms of Judah and Israel, an allusion apparently to the partition of the Byzantine Empire with Andronicus III to which the emperor had just reluctantly consented. This coin is known from only a unique specimen at Istanbul, and the main silver coinage of the late

1320s consists of basilica showing the two Andronici, their names being badly garbled, and having on the obverse a seated Virgin and on the reverse two standing figures. This in turn was succeeded by ones having a standing emperor on each face. The main groups were as follows, the reference P referring to Protonotarios' article and LPC to Bendall and Donald's *The later Palaeologan coinage*.

#### ANDRONICUS II AND MICHAEL IX

- A. Christ seated on high throne./Michael (beardless) standing on l. and Andronicus (bearded) on r., holding patriarchal cross. (P.I; LPC 64<sup>4</sup>) [1304]
- B. Same, but two stars beside throne./Andronicus and Michael standing, holding cross and gl. cr. respectively. (P. –; LPC 64<sup>3</sup>) [1305]
- C. Christ seated on low throne./Andronicus and Michael standing, holding plain cross. (P.II; LPC 66<sup>5</sup>)
- D. Christ seated on low throne./Same, but emps hold labarum. (P. III; LPC 66<sup>6</sup>) [1306]
- E. As last, but with legend *Autokratores Romaion*. (P. IV; LPC 88<sup>35</sup>) [1307]

#### ANDRONICUS II AND AHIJAH

- F. As last, but Andronicus II and Ahijah holding patriarchal cross. (P. –; LPC 102<sup>1</sup>)

#### ANDRONICUS II AND ANDRONICUS III

- G. Virgin seated on low throne between B and B./Andronicus II and III standing, holding labarum. (P. –; LPC –)
- H. Virgin seated on high throne./Same reverse type. (P. –; LPC 108<sup>2</sup>) [1308]
- I. Andronicus II standing, holding cross and akakia./As obverse, but Andronicus III. (P. II; LPC 109<sup>3</sup>) [1309] There is a variant showing Andronicus III holding a gl. cr. (P. III; LPC 110<sup>4</sup>)

Type I, which makes the two emperors equal in authority, perhaps dates from 1328. On these later coins there is virtually no difference in their appearance. It would seem, however, that there was some reversion to the *Autokratores Romaion* series, for a specimen of Type D overstruck on Type I has been published.

Attributable also to the 1320s on the evidence of hoards and of some details of the design, notably the cable pattern of the outer circles, are two purely religious types of basilicon having on the obverse a seated Christ and on the other a seated Virgin (LPC 190<sup>2, 3</sup> [1310, 1311]). One of them could conceivably have resulted from an accidental muling of two obverse dies used for different imperial issues, but the details of the figures on the other do not correspond to those of any known basilica of either Andronicus II or Andronicus III. Since there are no grounds for attributing them to a provincial mint, one must presume they

were struck at some moment during the civil war when the authorities were uncertain as to which was the best imperial type to use. To these should be added a basilicon having on one side a seated Virgin and on the other a bust of St George (*LPC* 190<sup>1</sup>).

The new silver coinage was initially accompanied by a half basilicon, with obverses corresponding to Types C (two emperors holding plain cross: *LPC* 70<sup>11</sup> [1312]) and E (two emperors holding labarum: *LPC* 70<sup>10</sup>), the names of Andronicus and Michael forming the inscriptions. The reverse is purely western, with a central cross and the name and title of Andronicus II (ΑΝΔΡΟΝΙΚΟΣ ΔΕΣΠΟΤΗΣ). The coins in good condition weigh c. 1.3 g, more than half the basilicon, but they are only about two-thirds fine. No corresponding coins with *Autokratores Romaion* are known, which suggests that the denomination did not prove useful and was soon discontinued.

Below these were billon coins of fair quality which Pegolotti, by analogy with the deniers tournois commonly employed in the Latin states, terms *tornesi piccoli*. Their Greek name is unknown. Pegolotti rates them at 8 to the basilicon, which would correspond to their metal content, for in good condition they weigh about 0.8 g and Pegolotti gives torneselli a fineness of 3 oz 12 d., which if correct for Constantinopolitan issues – it is confirmed by the analysis of a specimen of Type A below – would mean a silver content of about 0.25 g, one-eighth that of the basilicon. He also states that they were worth 8 stanmini, i.e. 8 copper trachea, a figure confirmed in 1341 by the mathematician Rhabdas, who in the course of demonstrating an arithmetical problem remarks incidentally that 1/26th of a carat is about two-thirds of a trachy. Since their obverse type shows Andronicus II alone they could in theory have been struck any time during the reign, but they presumably belong to the same period as the basilicon coinage.

The types of what appear to be tornesi are as follows.

- A. Standing emp., with vertical inscr. (fragments of *Andronikos despotes*) in field./Cross and circular inscr. + ΚΟΜΝΗΝΟC Ο ΠΑΛΑΙΟΛΟΓΟC. (*LPC* 36<sup>4</sup>)
- B. Same, but obverse inscr. (*Andronic en Xo*) circular. (*LPC* –) [1313]
- C. Same rev., but bust of emp. and St Demetrius(?) on obv. (*LPC* 36<sup>5</sup>)
- D. Standing emp., with Β and ♂ on cloak and vertical inscr./Β on cross, pellets in angles, and circular inscr. + ΚΟΜΝΗΝΟC Ο ΠΑΛΑΙΟΛΟΓΟC. (*LPC* –) [1314]
- E. Andronicus II and Michael IX standing with cross./Same rev. (*LPC* 64<sup>2</sup>)
- F. Andronicus II and Michael IX standing with labarum./Cross in quatrefoil with circular inscr. + ΚΕ CΘ CΩNT ΩC ΒΑCΙΑΙC. (*LPC* 70<sup>9</sup>, as basilicon) [1315]
- G. Bust of the Virgin *orans*, with head of Christ on breast, between Β and ♂./Half-figure of Andronicus. (*LPC* 36<sup>3</sup>)
- H. Similar, but full-length figure of emp. (*LPC* 106<sup>5</sup>)
- I. Andronicus II and Michael IX standing with labarum./Bust of St Michael. (*LPC* 226<sup>4</sup> = *LPC* Add. (1980) 45<sup>2</sup>)
- J. Three-quarter figure of emp., with vertical inscr./Palaeologan monogram. (*LPC* 38<sup>6</sup>)



The basilica of Andronicus III maintain with two exceptions the same general appearance as those of Andronicus II, but most of them are lighter in weight and, since he was sole ruler, the second standing figure in the field, where one is present, is that of a saint instead of a colleague. The first exceptional type (*LPC* 116<sup>2</sup>), which has on one side the inscription *ΑΝΔΡΟ/ΝΙΚΟC/ΑΥΤΟΚΡΑ/ΤΩΡ* across the field and on the other a Palaeologan monogram, is known in only a single specimen in the Barber collection. It is attributed by Bendall to Andronicus III instead of Andronicus II because of the elongated form of the marginal pellets. The other unusual type has three-quarter length figures of St George and Andronicus II [1316]. The more normal types are as follows.

- A. Christ seated on high throne between *Ⲑ* and *Β*./*Emp.* and St Demetrius standing. (*LPC* 118<sup>3</sup>) [1317]
- B. Similar, but other sigla in obv. field (*ⲗ*is and *Β*, *Λ* and *Π*, *ΒΚ* and *ΚΦ*) and the positions of *emp.* and saint are interchanged. (*LPC* 118<sup>4</sup>) [1318]
- C. Christ standing between two stars above *Β* and *Ⲑ*./*Emp.* standing. (*LPC* –) [1319]
- D. Christ standing between 2 *Β*s and a flower and a *ⲗ*is./Same rev. as Class B. (*LPC* 120<sup>5</sup>) [1320]

There is also a half basilicon (*LPC* 120<sup>6</sup>) [1321], having on the obverse a standing figure of St Demetrius and on the reverse the standing figures of Andronicus and the Virgin.

The coinage of basilica continued for fifteen years after Andronicus III's death, through the minority of John V (1341–7), the joint reign of John V and John VI (1347–53), and the sole reign of John VI (1353–4). The coins are all much lighter than those of the start of the century, c. 1 g as against 2.1 g, and the quality of their striking often suffers as a result of the thinness of their flans. The number of types known for each period suggests that they were changed every year. Most existing specimens of those of the minority come from two hoards of the period, and the high level of die-linking amongst these suggests that the issues were not large. Apart from the coins in the hoards they are all very rare.

Bertelè, who first described the coinage, listed eight types for the minority, to which a further two, unrepresented in the hoards referred to, have since been added. The total seems excessive for a period of six years, and in fact several of these classes are unreal. They are either mules resulting from the improper linking of dies of different issues or are varieties resulting from the careless work of die-sinkers. The substantive types are as follows.

- A. Bust of Christ with hands outstretched above half-figure of John V./St Demetrius and Andronicus III. (*LPC* 120<sup>7</sup>) [1322] The reverse type was carried over from the reign of Andronicus III [see 1320].
- B. Christ seated, crowning John V./Anna crowned by the Virgin. (*LPC* 138<sup>8</sup>)
- C. Andronicus III, kneeling, crowned by the Virgin./Anna standing with sceptre and John V with *akakia* and cross. (*LPC* 122<sup>8</sup> = Bertelè 6–25) [1323]
- D. Christ seated./Same rev. type. (*LPC* 132<sup>2</sup> = Bertelè 28–199) [1324] The positions of John V and Anna are sometimes accidentally reversed (*LPC* 132<sup>1</sup> = Bertelè 26–7).

- E. St Demetrius and the Virgin standing./Anna and John V holding long cross. (*LPC* 136<sup>6</sup> = Bertelè 216–45) [1325] A variety, evidently a die-sinker's error, shows Anna and John holding a sceptre as well as a long cross (*LPC* 136<sup>7</sup> = Bertelè 246–7). There are mules of this class with the preceding one (*LPC* 132<sup>3</sup> and 132<sup>4</sup> = Bertelè 200–13).
- F. Christ standing, two trees in field./Same type. (*LPC* 134<sup>5</sup> = Bertelè 214–15)

For the joint reign of John V and John VI there are again six types, though usually only one or two specimens of each seem to be known. The names of the emperors are usually only barely legible. The two last have moneyers' initials in the field.

- A. Christ standing, two trees in field./Two emps holding long cross. (*LPC* 140<sup>2</sup>) The obverse type carries on from the period of the regency.
- B. Christ standing in mandorla./Two emps, one holding a labarum and the other an akakia. (*LPC* 140<sup>3</sup>) [1326]
- C. Virgin seated with bust of Christ./Two emps holding long cross. (*LPC* 140<sup>4</sup>)
- D. Virgin seated with Infant Jesus./Same rev. (*LPC* 142<sup>5</sup>) [1327]
- E. St John the Baptist standing,  $\epsilon\phi$  and AB (in monogram) in the field./Same rev. (*LPC* 142<sup>6</sup>)
- F. John V on horseback,  $\epsilon\phi$  in field./John VI on horseback, AB in field. (*LPC* 143<sup>7</sup>)

There is in addition what appears to be a half basilicon, with two emperors on the obverse and a cross and four Bs and four stars on the reverse (*LPC* 144<sup>8</sup>).

For the short sole reign of John VI there is only a single type of basilicon, having on the obverse Christ seated on a high throne, with various letters in the field, and on the reverse the emperor (KTKZN) and St Demetrius standing (*LPC* 148<sup>12</sup>). Some (*LPC* 150<sup>3</sup>), smaller and cruder than the others and lighter in weight, may perhaps be provincial.

These coins of John VI effectively mark the end of the basilicon, for no coins are known which can be ascribed to the next decades. Andronicus IV, however, revived the denomination, minting a small silver coin (*LPC* 152<sup>2</sup>) having on one face a seated Christ and on the other the emperor standing. The weights of the two known specimens, just below 1 g, would be compatible with the coin being an eighth hyperpyron of the final coinage of the century, but the types are those of the old basilicon and it seems more likely to have been the last specimen of this denomination to have been struck.

## Copper trachea

An abundant coinage of ill-struck trachea, effectively of copper but preserving the concave fabric that showed them to be nominally of billon, made up the bulk of the small change struck under Michael VIII, Andronicus II and Andronicus III. They can be most easily approached by way of the elaborate listings by Simon Bendall, with enlarged drawings by

P. J. Donald, in their brochure on the trachea of Michael VIII and their more substantial survey of the whole coinage of this ruler's successors.

#### MICHAEL VIII ALONE

For Michael VIII Bendall lists nearly fifty types, and others may still come to light. It seems likely that they represent annual issues, since Michael's reign lasted over twenty years and two mints were active throughout, but some allowance has to be made for the possibility of minting at Magnesia continuing after 1261 and issues on such special occasions as the coronation of Andronicus II (1272) and perhaps the Council of Lyons (1274). If the issues were annual, however, there must be some errors in the mint attributions, for there are too many for Constantinople and too few for Thessalonica. This may quite well be the case, since the separation is in some cases very uncertain. Little can be said about their chronology. One Constantinopolitan type (C1)<sup>1</sup> and four Thessalonican ones (T2, 3, 4, 16) can be dated to the beginning of the reign through their presence in the Arta hoard, and a further group (C2, 11, 13, 15, 20, 23, 29; T15) must belong for the most part to the late 1260s or the early 1270s, since they all occurred together in a small hoard from Pergamum (Bergama) which included five specimens of the rare coronation issue of Michael and Andronicus which can be dated to 1272. Bendall notes that there seems to be an evolution in the portraiture of the emperor from an early version with a prominent forked beard, such as occurs on coins of Magnesia, to a later one with heavy side whiskers, these being represented by two slightly curving ladders of short horizontal lines on either side of the face from the chin upwards to the stemma.

The list given below, which follows the order of Bendall's handbook, is simply one of convenience, the coins being grouped roughly according to their reverse types in the order of (a) emperor kneeling, (b) two figures, (c) emperor seated and (d) emperor standing. Reference must be made to the handbook for details of the inscriptions and designs, which can only be reconstructed satisfactorily with the help of more than one specimen. I have omitted a few items: C3 (DO) is a contemporary forgery in copper of a hyperpyron; C19 seems to me the same type as C17 and T8A as T8, the star and sword having been eliminated on T8 by double-striking. UC1–UC3 are certainly coins of Andronicus II.

The types are largely variants on traditional themes, though their variety gives an impression of novelty. If the coins were not so badly struck the treatment of many iconographical details would make them of great interest to the art historian. There is a notable increase in the number showing the emperor seated, and the design of the emperor kneeling before Christ is taken over from the gold. The inscriptions are usually of a fragmentary character, only isolated letters being legible, and the large letters sometimes in the field – AA (C20),

<sup>1</sup> The references on this page and those that follow to coins of Michael VIII are those of Bendall's handbook, so that 'C' and 'T' followed by a numeral indicate issues of

Constantinople and Thessalonica respectively, while 'UC' and 'UT' indicate issues uncertainly ascribed to these mints.

**B B** (C6), **Ⲅ B** (C5, UC5b), **Κ Χ** (C1) – are puzzling. Under Theodore II the letters **A A** and **B B** had certainly represented dates, and the same is probably the case here, more especially since the **B B** occupies the same position on the Virgin's throne in both cases. If this is correct, the coins should be attributed to Magnesia and the years 1259 and 1260, thus somewhat relieving the overcrowding in the Constantinopolitan series. The **Ⲅ B**, on the other hand, is the Palaeologid symbol already referred to, although there is sometimes confusion with **B B**. As for **Κ Χ**, which occurs also on the gold of the beginning of the reign, it is probably no more than a moneyer's initial which was duplicated for reasons of symmetry.

*Constantinople*

- C1. Bust of Christ Emmanuel between **Κ Χ**./Emp. kneeling before Christ. [1339]
- C2. Virgin seated./Emp. kneeling before Christ. [1340]
- C4. Bust of Christ./Emp. and St Michael with labarum. [1341]
- C5. Virgin seated between **Ⲅ B**./Emp. crowned by Christ.
- C6. Virgin seated on high throne with **B B**./Emp. embraced by St Michael. [1342]
- C7. Virgin standing half-1./Emp. and St George with labarum. [1343]
- C8. St Demetrius standing./Emp. crowned by Virgin. [1344]
- C9. Bust of St Demetrius./Half-figure of emp. with St Michael above. [1345]
- C10. Half-figure of St George./Emp. and St Constantine with patriarchal cross. [1346]
- C11. Half-figure of St Michael./Emp. and St Demetrius (?) with labarum. [1347]
- C12. Half-figure of St Michael./Half-figures of emp. and St George with patriarchal cross. [1348]
- C13. Half-figure of St Theodore./Emp. crowned by Christ. [1349]
- C13 bis. Empty throne (*Hetoimasia*)./Emp. crowned by military saint.
- C14. Bust of Christ./Emp. seated with labarum and model of city. [1350]
- C15. Half-length figure of the Virgin turning 1./Emp. standing with labarum and globus with patriarchal cross. [1351]
- C16. Bust of Virgin *orans*./Emp. seated with sword. [1352]
- C17, 19. Bust of St George./Emp. seated on low throne with labarum and akakia. [1353]
- C18. Seraph with two spears./Emp. seated on high throne with labarum and akakia. [1354]
- C20. Bust of Christ between **AA**./Half-figure of emp. with labarum and globus with patriarchal cross. [1355]
- C21. Virgin seated on high throne./Emp. standing with sword. [1356]
- C22. St George standing./Emp. standing with labarum and akakia. [1357]
- C23. St Michael standing./Emp. standing with labarum and akakia. [1358]
- C24. St Michael standing./Emp. standing with trifid sceptre and gl. cr. [1359]
- C25. Bust of St Nicolas./Emp. standing with cross and akakia. [1360]

- C26, 27. Cross with central X and Φ Λ|ΔΦ|Δ|Ε (for Φιλαδέλφεια) in angles./Emp. standing with labarum and gl. cr. [1361]  
 C28. Patriarchal cross on leaved base./Bust of emp. with labarum and gl. cr. [1362]  
 C29. Seraph./Half-figure of emp. with labarum and patriarchal cross.  
 C29 bis. Bust of Christ Emmanuel./Emp. standing with labarum and akakia. [1364]  
 UC4. Christ standing./Emp. seated on high throne with labarum and gl. cr. [1363]  
 UC5a. Virgin seated on high throne./Emp. seated with cross and gl. cr.  
 UC5b. Same, but B B on Virgin's throne.

*Thessalonica*

- T1. St Demetrius seated with sword./Bust of emp. crowned by Christ. [1368]  
 T2. St Demetrius seated with sword./Emp. crowned by St Michael. [1369]  
 T3. Bust of St Demetrius./Emp. and St Michael with cross. [1370]  
 T4. St Michael standing./Half-figure of emp. and St Demetrius with nimbate cross. [1371]  
 T5. Half-figure of St Michael./Half-figure of emp. crowned by Virgin. [1372]  
 T6. Patriarchal cross./Emp. and St Demetrius holding model of city. [1373]  
 T7. Cross and four stars./Busts of emp. and St Demetrius holding model of city, with star above. [1374]  
 T8, 8a. Winged patriarchal cross./Emp. and St Demetrius holding sword, with star above. [1375]  
 T9. Christ seated./Emp. standing with cross and model of city. [1376]  
 T10. Half-figure of St Demetrius./Emp. standing with labarum and globus with patriarchal cross. [1377]  
 T11. St Demetrius seated./Emp. standing with patriarchal cross and akakia. [1378]  
 T12. Bust of St Demetrius./Winged emp. standing. [1379]  
 T13. St Demetrius standing./Emp. standing with cross and lis. [1380]  
 T14. St Demetrius standing./Emp. standing with lis and labarum. [1381]  
 T15. Elaborate voided cross./Bust of emp. with labarum and gl. cr. [1382]  
 T16. Large lis./Emp. half-l. with cross and akakia. [1383]  
 T16 bis. St Demetrius standing between two stars./Emp. crowned by Virgin. [1384]  
 T-. Bust of St George./Emp. seated holding labarum and akakia. [1385]  
 UT1. Bust of Virgin *orans*./Half-figures of emp. and saint, with star in segment of circle above. [1386]  
 UT2. Flower./Emp. and Virgin holding large patriarchal cross. [1387]  
 UT3. St Demetrius standing./Emp. standing with cross and akakia. [1388]  
 UT4. St Demetrius standing./Winged emp. with patriarchal cross. [1389]  
 UT5. Bust of St Demetrius./Emp. holding patriarchal cross and standard(?).

## MICHAEL VIII AND ANDRONICUS II

*Constantinople*

- A. Bust of St Nicolas./Christ blessing the two emps. (C1) [1365]
- B. Half-figure of St Michael./Two emps standing, one holding a palm. [1366]
- C. Bust of Virgin./Two emps standing, holding labarum. (*LPC* 76<sup>18</sup>) [1367]

*Thessalonica*

- A. Half-figure of St Theodore./St Michael blessing the two emps. (T1) [1390]
- B. Bust of St Theodore./Andronicus II crowned by Michael VIII. [1391]
- C. Bust of St Michael./Two emps holding patriarchal cross. [1392]

## ANDRONICUS II

The trachea of Andronicus II exhibit the same great diversity of type as those of Michael VIII, and we are equally ignorant regarding their order of issue. The following list is based on that of Bendall and Donald, with coins of Andronicus alone preceding those of Andronicus and Michael IX.

*Constantinople*

- A. Head of Christ surrounded by four crosses and four stars./Archangel presenting emp. to Christ. (*LPC* 38<sup>7</sup>)
- B. St Tryphon standing./As last. (*LPC* 38<sup>8</sup>) [1398]
- C. Virgin within city walls./Emp. in proskynesis before Christ. (*LPC* 40<sup>9</sup>) [1399]
- D. Virgin *orans* half-l./Emp. and military saint. (*LPC* 40<sup>10</sup>) [1400]
- E. Half-figure of St Michael./Emp. blessed by Virgin. (*LPC* 42<sup>11</sup>)
- F. Half-figure of St Michael./Emp. and Christ. (*LPC* 42<sup>12</sup>)
- G. Half-figure of St Theodore./Archangel and emp. holding labarum. (*LPC* 44<sup>13</sup>) [1401]
- H. Similar obv./Emp. and archangel holding labarum. (*LPC* 44<sup>14</sup>) [1402]
- I. INB, with ΔK above./Emp. blessed by Virgin. (*LPC* 46<sup>15</sup>) The second indiction, on a coin of Andronicus II alone, can only be 1288/9. Perhaps a tetarteron, not a trachy.
- J. Christ standing between B and B./Emp. seated with patriarchal cross. (*LPC* 46<sup>16</sup>) [1403]
- K. Half-figure of St George./Emp. seated. (*LPC* 46<sup>17</sup>) [1404]
- L. Christ seated on high throne./Emp. standing. (*LPC* 46<sup>18</sup>) [1405]

- M. Virgin seated on low throne./Emp. standing. (*LPC* 48<sup>19</sup>) [1406]
- N. Virgin standing./Winged emp. with patriarchal cross. (*LPC* 48<sup>20</sup>)
- O. Half-figure of St Theodore./Circular inscr., half-figure of emp. holding labarum. (*LPC* 50<sup>21</sup>) [1407]
- P. Half-figure of St Michael./Similar, but emp. holds cross. (*LPC* 50<sup>22</sup>) [1408]
- Q. Same obv./Emp. standing. (*LPC* 50<sup>23</sup>) [1409]
- R. Bust of St Nicholas./Emp. standing with patriarchal cross. (*LPC* 52<sup>24</sup>) [1410]
- S. Similar./Emp. standing with labarum. (*LPC* 52<sup>25</sup>) [1411]
- T. Seraph./Bust of emp. with labarum. (*LPC* 52<sup>26</sup>)
- U. Same./Emp. standing. (*LPC* 54<sup>27</sup>) [1412]
- V. Four crosses./Emp. standing with jewelled cross. (*LPC* 56<sup>30</sup>)
- W. Palaeologid monogram in quatrefoil./Emp. standing. (*LPC* 56<sup>31</sup>) [1413]
- X. Lis in quatrefoil./As last. (*LPC* 56<sup>32</sup>)
- Y. Uncertain type./Emp. standing. (*LPC* 58<sup>34</sup>) [1414]
- Z. Virgin *orans*./Emp. standing. (*LPC* 58<sup>35</sup>) [1415]
- AA. Double-headed eagle./Inscr. (*Autokrator Romaion*), cross with B in each quarter. (*LPC* 194<sup>7</sup>)

### *Thessalonica*

- A. Half-figure of archangel./Emp. bowing before Christ. (*LPC* 204<sup>1</sup>) [1428]
- B. Bust of St Demetrius./Emp. crowned by Christ, star and Ⲅ in field. (*LPC* 204<sup>2</sup>) [1429]
- C. Ⲅ B./Emp. crowned by St Michael. (*LPC* 206<sup>3</sup>) [1430]
- D. Double-headed eagle./Emp. and St Demetrius. (*LPC* 206<sup>4</sup>)
- E. Head of cherub with two spears./Half-figure of emp. with cross-sceptre. (*LPC* 54<sup>28</sup>) [1431]
- F. Flower with six petals./Emp. and St Demetrius with haloed cross. (*LPC* 208<sup>7</sup>) [1432]
- G. Wing and cross./Emp. and St Demetrius with cross. (*LPC* 208<sup>8</sup>) [1433]
- H. Uncertain./Busts of emp. and St Demetrius holding model of city. (*LPC* 210<sup>9</sup>)
- I. Bust of St Demetrius./Emp. seated. (*LPC* 210<sup>10</sup>) [1434]
- J. Half-figure of St Demetrius, Ⲅ to 1./Winged emp. holding model of city 1. (*LPC* 210<sup>11</sup>) [1435]
- K. Bust of St Demetrius./Winged emp. facing. (*LPC* 212<sup>12</sup>) [1436]
- L. Bust of St Demetrius./Emp. standing holding two lis. (*LPC* 212<sup>13</sup>) [1437]
- M. St Demetrius standing./Emp. standing, two stars to 1. (*LPC* 212<sup>14</sup>) [1438]
- N. Bust of St Demetrius./Bust of winged emp. (*LPC* 214<sup>15</sup>) [1439]
- O. Bust of St Demetrius holding haloed cross./Emp. holding cross 1. (*LPC* 214<sup>16</sup>) [1440]

- P. St Demetrius standing./Emp. holding haloed cross l. (*LPC* 214<sup>17</sup>) [1441]
- Q. St Demetrius standing./Emp. holding patriarchal cross l. (*LPC* 216<sup>18</sup>) [1442]
- R. Bust of military saint./Winged emp. standing, holding model of city r. (*LPC* 216<sup>19</sup>)
- S. Uncertain./Winged emp. holding patriarchal cross l. (*LPC* 216<sup>20</sup>) [1443]
- T. St Demetrius standing between ♂ and B./Emp. standing with large cross l. (*LPC* 218<sup>21</sup>) [1444]
- U. Wing holding patriarchal cross, ♂ to l./Emp. holding haloed cross l. (*LPC* 218<sup>22</sup>) [1445]
- V. Winged patriarchal cross./Emp. standing. (*LPC* 218<sup>23</sup>) [1446]
- W. Two stars between two wings./Half-figure of emp. beneath arcade. (*LPC* 220<sup>24</sup>) [1447]
- X. Cross, star in each quarter./Half-figure of emp. (*LPC* 220<sup>25</sup>) [1448]
- Y. Patriarchal cross and two stars./Emp. standing with two haloed crosses. (*LPC* 220<sup>26</sup>) [1449]
- Z. Patriarchal cross with IC XC N K./Emp. standing with stars. (*LPC* 222<sup>27</sup>) [1450]
- AA. Trellis pattern./Emp. standing with patriarchal cross. (*PLC* 222<sup>28</sup>) [1451]
- BB. Four-petalled flower and four stars./Half-figure of emp. holding large lis l. (*LPC* 222<sup>29</sup>) [1452]
- CC. Four-petalled flower on square./Emp. standing with stars. (*LPC* 224<sup>30</sup>) [1453]
- DD. Flower with six petals./Half-figure of emp. holding model of city l. (*LPC* 224<sup>31</sup>)
- EE. Same./Emp. standing holding ♂ and B. (*LPC* 224<sup>32</sup>) [1454]
- FF. Large lis./Winged emp. holding model of city l. (*LPC* 226<sup>33</sup>) [1455]
- GG. Palaeologid monogram and stars./Winged emp. standing. (*LPC* 226<sup>34</sup>) [1456]
- HH. Two wings and star./Emp. and military saint. (*LPC* 206<sup>5</sup>)
- II. Patriarchal cross between ♂ and B./Emp. standing between ♂ and B. (*LPC* 54<sup>29</sup>) [1457]
- JJ. Palaeologid monogram./Saint and emp. standing, star and ♂ between. (*LPC* Add. 46<sup>7</sup>) [1458]

#### ANDRONICUS II AND MICHAEL IX

##### *Constantinople*

- A. Christ seated./Bust of Christ, above cross, blessing emps. (*LPC* 72<sup>12</sup>)
- B. Cross on leaved base between ♂ and B./Similar, but Christ standing. (*LPC* 72<sup>13</sup>) [1416]
- C. Bust of Christ./Two emps standing with cross. (*LPC* 72<sup>14</sup>) [1417]
- D. Christ seated./Two emps standing with labarum. (*LPC* 74<sup>15</sup>)
- E. Virgin between ♂ and B./Two emps standing with cross. (*LPC* 74<sup>16</sup>)



- F. Bust of Virgin./Similar. (*LPC* 76<sup>17</sup>) [1418]
- G. Same./Similar, but emps hold labarum. (*LPC* 76<sup>18</sup>)
- H. Same./Similar, but three-quarter figures of emps. (*LPC* 78<sup>19</sup>) [1419]
- I. Half-figure of archangel./Two emps standing, Andronicus on l., with patriarchal cross. (*LPC* 78<sup>20A</sup>) See also *Thessalonica*, C.
- J. Bust of St Nicolas./Two emps with labarum. (*LPC* 78<sup>21</sup> and 230<sup>3</sup>) [1420]
- K. Patriarchal cross with  $\overline{\text{IC}} \overline{\text{XC}}$ ./Two half-figures of emps with labarum. (*LPC* 80<sup>22</sup>) [1421]
- L. Ornate labarum on elaborate base./Busts of two emps with cross. (*LPC* 80<sup>24</sup>) [1422]
- M. Cross and four Bs./Two emps with labarum. (*LPC* 82<sup>25</sup>) [1423]
- N. NB./Two emps with long cross. (*LPC* 82<sup>26</sup>) [1424] The second indiction could be either 1303/4 or 1318/19.

### *Thessalonica*

- A. Archangel l. holding labarum./Bust of Christ crowning two emps. (*LPC* 228<sup>1</sup>) [1459]
- B. Bust of St Demetrius./Half-figures of two emps with star above. (*LPC* 228<sup>2</sup>) [1460]
- C. Half-figure of archangel./Two emps, Andronicus on l., holding labarum. (*LPC* 230<sup>3</sup> = 78<sup>20</sup>)
- D. Winged patriarchal cross./Two emps holding haloed cross. (*LPC* 230<sup>4</sup>) [1461]
- E. Six-petalled flower./Michael crowned by Andronicus. (*LPC* 230<sup>5</sup> = 208<sup>6</sup>)
- F. Circle with vertical band./Two emps with haloed cross. (*LPC* 232<sup>6</sup>) [1462]
- G. Palaeologid monogram./Two emps holding lis on staff. (*LPC* 232<sup>7</sup>) [1463]
- H. Bust of St Michael./Two emps holding patriarchal cross. (*LPC* 78<sup>20</sup>) [1464]
- I. Cross with two stars and two Bs./Bust of two emps holding large patriarchal cross. (*LPC* 80<sup>23</sup>) [1465]

### ANDRONICUS II AND ANDRONICUS III

#### *Constantinople*

- A. Half-figure of Virgin./Circular inscr.; two emps, Andronicus III on l., holding cross. (*LPC* 110<sup>5</sup>) [1425]

#### *Thessalonica*

- A. Bust of St Demetrius./Half-figures of two emps holding cross surmounted by small bust of Christ. (*LPC* –)

- B. Six-petalled flower./Andronicus III crowned by Andronicus II. (*LPC* 230<sup>5</sup> = 208<sup>6</sup>) [1466]

#### ANONYMOUS RELIGIOUS COINS

A few anonymous religious coins in copper can be dated to the 1320s, like the anonymous religious basilica (see p. 297), but the circumstances of their issue is obscure.

- A. Christ seated on high throne./Bust of Virgin. (*LPC* 192<sup>4</sup>)  
 B. St Demetrius standing./Cross fleury. (*LPC* 192<sup>5</sup>)  
 C. Flower with six petals./Virgin standing. (*LPC* 196<sup>8</sup>)

#### ANDRONICUS III

The apparently almost complete absence of Constantinopolitan trachea of Andronicus III is probably due to too many being attributed to his grandfather, but may be a pendant to the equally conspicuous absence of gold struck in his name. It is difficult to say what denomination the Thessalonican issues are intended to represent, since many of them are flat instead of being concave.

#### *Constantinople*

- A. Emp. standing./St Demetrius standing. (*LPC* 122<sup>9</sup>) [1426] The imperial representation is on the obverse (convex) face of the coin.

#### *Thessalonica*

- A. Bust of St Demetrius./Emp. crouching before Christ. (*LPC* 234<sup>1</sup>)  
 B. Bust of St Demetrius./Christ crowning emp., who holds two patriarchal crosses. (*LPC* 234<sup>2</sup>)  
 C. Winged patriarchal cross./Emp. and St Demetrius holding cross, with star in segment of circle above. (*LPC* 234<sup>3</sup>)  
 D. Virgin standing, four stars in field./Emp. blessed by small figure of Christ, ♂ in field r. (*LPC* 236<sup>4</sup>) [1467]  
 E. Bust of Virgin (?)./Emp. seated, holding large patriarchal cross to l., B in field r. (*LPC* 236<sup>5</sup>, inadequately described.) [1468]  
 F. Bust of St Demetrius./Emp. holding two patriarchal crosses. (*LPC* 236<sup>6</sup>) [1469]  
 G. St Demetrius seated./Emp. standing, lis to l., seven stars around. (*LPC* 238<sup>7</sup>)  
 H. St Demetrius standing between two crosses each with three cross-bars./Emp. standing holding haloed cross and church. (*LPC* 238<sup>8</sup>)

- I. Bust of saint./Winged emp. holding haloed cross l., in l. field. (*LPC* 238<sup>9</sup>) [1470]
- J. Uncertain (bust?)./Emp. standing holding large labarum l. (*LPC* 240<sup>10</sup>)
- K. Bust of saint, B to r./Emp. standing between two stars and two Bs. (*LPC* 240<sup>11</sup>) [1471]
- L. Palaeologid monogram./Bust of Virgin. (*LPC* 194<sup>6</sup>)
- M. Palaeologid monogram with stars above./Emp. standing, blessed by Christ(?). (*LPC* 240<sup>12</sup>)
- N. Palaeologid monogram with star above and to l./Emp. riding r., B and star in field. (*LPC* 242<sup>13</sup>)
- O. Bust of St Demetrius./As last. (*LPC* 242<sup>14</sup>)
- P. St Demetrius riding r./As last. (*LPC* 242<sup>15</sup>)
- Q. Palaeologid monogram, lattice pattern to l./As last. (*LPC* 254<sup>1</sup>)
- R. Uncertain type./Half-figure of emp. holding large patriarchal cross in r., star in r. field. (*LPC* –) [1472]
- S. Palaeologid monogram./Saint (?) and emp., large lis between. (*LPC* Add. 47<sup>13</sup>) [1473]

## JOHN V, MINORITY

*Thessalonica*

- A. Archangel standing./Andronicus III and John V (very small) standing. (*LPC* 244<sup>1</sup>) [1474]

## JOHN V AND JOHN VI

*Constantinople*

- A. Bust of Virgin./Two emps holding patriarchal cross. (*LPC* 146<sup>11</sup>) [1427]

## JOHN V ALONE

*Constantinople*

- A. St George standing./Emp. standing. (*LPC* 150<sup>1</sup>)

## ANDRONICUS III

*Thessalonica*

- A. St Demetrius standing./Saint and emp. standing. (*LPC* 256<sup>1</sup>)

## Copper assaria

There are two phases of the flat copper coinage that provided the lowest denomination of small change in the Palaeologid period. In neither of them was there any attempt to reproduce the heavy folles of the early Empire. There was in fact no need for heavy copper coins, since although the basilica of the first half of the fourteenth century were not much lighter than the old miliaresia they had beneath them a fractional coinage of overvalued trachea, so that the assaria that were formerly of copper could be of quite moderate size, about an inch in diameter and weighing some 2 g. Subsequently, in the period of the silver hyperpyron, when there was no billon coinage, small silver coins existed which weighed no more than 0.5 g, and the assaria were replaced by two denominations of copper, one smaller and thicker than the assaria but about the same weight, the other *c.* 12 mm in diameter and weighing under 1 g. The two latter coins are described, in relation to the silver hyperpyron, on pp. 317–18.

The only flat copper coin that is certainly attributable to Michael VIII, one having on the obverse a half-length figure of St Michael and on the other a similar figure of the emperor holding a labarum and a globus with patriarchal cross [1475], belongs to the old tetarteron pattern. The same is true of an early and fairly common coin of Andronicus II alone with standing figure of the Virgin on the obverse and one of Andronicus on the reverse (*LPC* 60<sup>36</sup> [1476]). The new assaria of quite different fabric were probably introduced at the same time as the basilicon in 1294. They continued to be struck, with some fluctuations in module but no appreciable change in weight, down to the 1350s, though there was an interruption in the 1320s after Michael's death. Under Andronicus III the practice of annual changes to type was abandoned. Except for the coins struck at Thessalonica with the effigies of John V and Anna the mint appears to have been Constantinople.

The obverse type of the assaria – it is convenient to treat the 'imperial' side as the obverse – usually consists of two standing imperial figures or the half-length figure of a single emperor. The reverses are very varied, as can be seen from Pls 93–4, and the fact that some of the reverse types consist of indictional dates implies that at least during the joint reign of Andronicus II and Michael IX the changes were made annually. The relative order of a few types is known through overstriking. The completest catalogue of types available is that of *LPC*, which forms the basis of the lists that follow.

### ANDRONICUS II AND MICHAEL IX

The typical assaria of Andronicus II and Michael IX have on the obverse the standing figures of the two co-rulers, usually full-length but sometimes only half- or three-quarters length, holding a long cross or labarum. The emperors are sometimes specifically named but often there is simply an *Autokratores Romaion* legend, as on the basilica, which could of course cover coins of the two Andronici if such were struck. There are only two significant variants,

one inspired by the gold and showing Christ blessing the two co-emperors, the other, to which there is a parallel silver issue, having a single standing figure on each face of the coin. The reverses are very various: a cross, which may be ornamented in several different fashions; a figure of the Virgin or of a seraph or one of the saints; an inscription in several lines across the field; the letters B Θ filling the field or in the angles of a cross; an indictional date filling the field; a Palaeologan monogram. Occasionally the obverse or reverse type is surrounded by a circular inscription, as was normal on western deniers, which resulted in coins curiously hybrid in appearance. As with the trachea, the types are too numerous for all of them to be illustrated, but at least one example of each group will be found on Pls 93–4. The following list follows for the most part the order in *LPC*.

- A. Two emps with patriarchal cross./Circular inscr., + KYPIE BOHΘVZ BACIAIC, with bust of Christ. (*LPC* 82<sup>27</sup>) [1477]
- B. As last./Seraph. (*LPC* 84<sup>28</sup>) [1478] Sometimes overstruck on *LPC* 94<sup>44</sup>, and by *LPC* 124<sup>10</sup> of Andronicus III.
- C. Two emps with labarum./Circular inscr., + ANΔPONIKOC ΔΕCΠOΘHC, with cross. (*LPC* 84<sup>29</sup>) [1479] Sometimes overstruck by *LPC* 126<sup>12</sup> of Andronicus III.
- D. As last./Cross and four stars. (*LPC* 84<sup>30</sup>) [1480]
- E. Two emps with cross./NA. (*LPC* 86<sup>31</sup>) [1481] The first indiction could be either 1302/3 or 1317/18.
- F. Two emps with labarum./Monogram. (*LPC* 86<sup>32</sup> [1482] with ANΔP-ONIKOC; *LPC* 100<sup>53</sup> with AVTOK-PATOP.)
- G. Andronicus II standing./Michael IX standing. (*LPC* 86<sup>33</sup>) [1483] Michael is sometimes, but not invariably, bearded.
- H. Christ blessing two kneeling emps./Bust of St Michael. (*LPC* 88<sup>36</sup>) [1484] Some specimens are slightly concave.
- I. Two emps with labarum./Inscr., + KVPIE CΩ CONTΘC BACIAEIC, with bust of Christ. (*LPC* 90<sup>37</sup>) [1485]
- J. As last./Virgin standing. (*LPC* 90<sup>38</sup>) [1486]
- K. As last./Bust of St Andronicus. (*LPC* 90<sup>39</sup>) [1487]
- L. As last, but ☉ on labarum shaft./Bust of St Michael. (*LPC* 92<sup>40</sup>) Bendall subsequently described this coin as a trachy (*N. Circ.* lxxxviii (1980), 47).
- M. Two emps (half-length) with labarum. /AVTO|KPATO|PECPOM|AIΩN. (*LPC* 92<sup>41</sup>) [1488]
- N. Two emps with labarum./+ THC|MAKEΔ|ONIAIC. (*LPC* 92<sup>42</sup>) [1489]
- O. As last./ΠΛ ΚΩδ (i.e. πόλεως Κωνσταντινουπόλεως). (*LPC* 94<sup>43</sup>)
- P. As last, but ☉ on labarum shaft./Θ B. (*LPC* 99<sup>44</sup>) [1490] Sometimes overstruck by *LPC* 84<sup>28</sup>.
- Q. Two emps with cross./ΝΓ. (*LPC* 94<sup>45</sup>) [1491] The third indiction could be 1304/5 or 1319/20.

- R. Two emps with labarum./NIA (the Δ having the form Ω). (*LPC* 96<sup>46</sup>) [1492] The fourteenth indiction could be 1300/1 or 1315/16.
- S. As last./NIE. (*LPC* 96<sup>47</sup>) Sometimes overstruck on *LPC* 96<sup>46</sup>, or by *LPC* 126<sup>12</sup> of Andronicus III. The fifteenth indiction could be 1301/2 or 1316/17.
- T. As last./Cross and four Bs. (*LPC* 96<sup>48</sup>)
- U. Circular inscr., + AVTOKPATOPEC PΩMAIΩN, and two emps with labarum./Cross and four Bs. (*LPC* 98<sup>49</sup>) [1493]
- V. As last./Monogram. (*LPC* 98<sup>50</sup>) [1494]
- W. Two emps with patriarchal cross./Same circular inscr., cross. (*LPC* 98<sup>51</sup>) [1495]
- X. Two emps with labarum./Patriarchal cross and two Bs. (*LPC* 100<sup>52</sup>)

## ANDRONICUS III

Only four types of flat copper coins seem on grounds of portraiture and style, borne out in one case by the evidence of overstriking, better attributed to Andronicus III than to the later years of Andronicus II. Three bear the name of Andronicus, with or without the title *despotes*; the fourth has the simple legend *Autokrator Romaion*.

- A. Half-length figure of emp./Bust of St George. (*LPC* 124<sup>10</sup> [1496]; sometimes overstruck on *LPC* 94<sup>44</sup>, of Andronicus II.)
- B. Same, with with longer title./Circular inscr., cross. (*LPC* 124<sup>11</sup>) [1497]
- C. Similar, but emp. holds gl. cr. instead of akakia./NB. (*LPC* 126<sup>12</sup> [1498]; sometimes overstruck on *LPC* 96<sup>47</sup> of Andronicus II.) The second indiction can only be 1333/4.
- D. Emp. standing./Cross *ancrée*. (*LPC* 126<sup>13</sup>) [1499]

## JOHN V AND JOHN VI

No assaria have so far been attributed to the minority of John V, but three of the four 'stamena' with fragmentary inscriptions involving elements of IΩ EN XΩ which Bendall attributed to the joint reign of John V and John VI are flat assaria of the same rulers. To these can be conjecturally added another coin with no legible inscription at all.

- A. Two emps standing holding akakia jointly./Christ seated on high throne; ΕΦ in field. (*LPC* 144<sup>9</sup>) [1500]
- B. Similar, but emps hold cross./Christ seated on low throne. (*LPC* 146<sup>10</sup>)
- C. Similar./Cross fleury. (*LPC* 146<sup>12</sup>) [1501]
- D. Similar./Two figures holding patriarchal cross. (*LPC* Add. 45<sup>6</sup>) [1502]

What precisely happened to assaria of the traditional kind after the joint reign is unclear, since there are so many gaps in our knowledge of the coinage of the mid-century. But in their last stage they had a provincial counterpart in the form of flat copper coins struck at Thessalonica.

This coinage was first identified by Bendall, mainly on the basis of a small hoard from Pella, and attributed by him to the dowager empress Anna, who after the downfall of John VI seems to have received Thessalonica as an appanage and ruled it down to her death (c. 1360?). The coins have typically on one face the figure of an emperor (John V), accompanied by the letter B (for *basileus*), and on the other that of an empress, usually holding the model of a church, accompanied by the letter A. There are always a number of stars in the field. The only variants have two standing figures on the obverse, either two saints (*LPC* 252<sup>8</sup>) or John V and St Demetrius (*LPC* 260<sup>4</sup>), the latter having on the reverse Anna standing in an archway surrounded by stars and without the usual church. Since coins of the main series vary only in detail it does not seem to be necessary to list them here. Seven types are illustrated on Pl. 94, nos 1503–9, and detailed descriptions of the whole group will be found in *LPC*, pp. 248–53, 260.

## The politikon coinage

A small group of fourteenth-century Byzantine coins of low value have as a common feature the inscription +ΠΟΛΙΤΚΟΝ, of disputed meaning but probably implying something intended to supply a specific public need. Most of them are anonymous, but three are imperial, one having on the obverse the figures of Andronicus III and a standing saint, a second that of John V, and a third those of John V and another person whose name was read by Sabatier as MAN(uel) but who is more probably John VI. The word *politikon* usually takes the form of a circular inscription in large letters round a cross or a bust of the Virgin, giving the coins a purely western appearance despite the word being Greek, but in two cases it runs in several lines across the field. Non-imperial types include a castle, three keys, and a two-headed eagle, the first being a common Frankish type and the third a Palaeologid symbol also found on many coins of the Gattilusi of Lesbos. The coins are usually of billon, about 250/1000 fine, and weigh between 0.5 g and 1 g, but two types exist in both billon and copper, the copper versions weighing c. 2 g. The politikon coins apparently form the tornesi of the middle years of the fourteenth century, the anonymous ones belonging to the 1340s in succession to those of Andronicus III and the series ending in the 1350s.

### IMPERIAL TYPES

- A. +ΠΟΛΙΤΚΟΝ Bust of Virgin./Andronicus III and saint (Demetrius?) standing. (*LPC* 180<sup>1</sup>) [1328] Exists also in AE.
- B. Same inscr. Cross./John V standing. (*LPC* 180<sup>2</sup>) [1329] Exists also in AE [1330].
- C. Same inscr. Palaeologid monogram./St Demetrius and emp. (John V?) standing. (*LPC* 182<sup>3</sup>)
- D. Same inscr. Bust of Virgin./John V and John VI (?) holding patriarchal cross. (*LPC* 184<sup>6</sup>)

## ANONYMOUS TYPES

- E. Same inscr. Cross with two stars and B & in quarters./Castle. (*LPC* 186<sup>8</sup>) [1331]
- F. Same inscr. Cross./Castle. (*LPC* 184<sup>7</sup>) [1332]
- G. Obv. as last./Two-headed eagle. (*LPC* 186<sup>9</sup>) [1333]
- H. +ΠΟΛΙΤΙΚΟΝ in three lines./Three keys. (*LPC* 186<sup>10</sup>) [1334] A specimen at Dumbarton Oaks has been skilfully cut down to make a half (0.34 g) with only two keys visible. [1335]
- I. Obv. as last./Cross with B and three pellets in each quarter. (*LPC* 186<sup>11</sup>) [1336]

A billon coin at Dumbarton Oaks [1337] with +ΡΩΜΑΙΩΝ ΦΥΛΑΞ and a cross on both sides (*LPC* 188<sup>3</sup>) probably belongs to the series, the inscription ('Guardian of the Romans') presumably referring to the central cross. Another small billon coin having on the obverse a Palaeologid monogram occupying the whole field and on the reverse a cross and four stars (*LPC* 188<sup>12</sup>) seems in general appearance and weight (0.42 g) to go with the politikon series, but the reverse type is that of the small copper coins of the early fifteenth century (see p. 318).

The politikon coins are customarily attributed to Constantinople, but the generally 'Frankish' aspect of most of the types would seem more appropriate to a provincial mint than to that of the capital. The castle found on two types is reminiscent of the building which St Demetrius or the emperor sometimes holds on Thessalonican coins, and a tempting attribution of the anonymous coins would be Thessalonica during the period of the Zealot revolt (1342–50), when the city was virtually a self-governing commune. On general grounds of appearance, indeed, a mint further south than Thessalonica might be preferable, for the coins could have been most readily interchanged with billon tournois of Thebes, Athens and the Morea, but one would expect coins of a southern mint to be common in Greek collections, which does not seem to be the case with the politikon series. No wholly satisfactory explanation of the coinage has indeed yet been found.

## The stavraton and late fractional coinage

The last decades of John V's reign saw the replacement of the silver basilicon coinage by a silver half hyperpyron known as a stavraton, with corresponding fractions. The basic unit of the new system was a heavy silver coin weighing initially about 8.5 g, twice as heavy as the largest silver grossi current in western Europe, having on one face the bust of Christ Pantocrator in a border, usually of alternating globules and stars, and on the other a bust of the emperor surrounded by a double circle of inscription. It was accompanied by two silver fractions, the half stavraton and the one-eighth stavraton, and by two flat copper denominations, called tornesi and follari by the Latins. The silver raise two problems. The lesser one is that of distinguishing the stavrata of John VII and their fractions, if they existed, from



those of John V and John VIII. The greater one is that of the date of their introduction. It is usually assumed to have been between 1366/7, when the oddly nicknamed 'Green Count', Amadeus VI of Savoy, was in Constantinople, for the detailed expense account of his visit shows no trace of their existence, and 1381/2, when plates of florins and *istävrät* are listed amongst the gifts at the wedding of the future sultan Bayazid I. Scholars have consequently discussed at length, though without arriving at any certain conclusion, the question of whether they were created by Andronicus IV (1376–9) or slightly earlier by John V. A more fundamental problem, however, is whether the 'Andronicus' coins should not be attributed to Andronicus III?

Such a possibility is raised by a reference to heavy silver coins in an unpublished treaty between the Venetian duke of Crete and the emir of Aydin of 9 March 1337, which required Venetian merchants to pay a duty of 2 'pieces' of soap or 2 stavrata on each cask of soap. When the treaty was renewed on 7 April 1353 the duty on wine, which was expressed in gold florins, was left unchanged, but that on soap now took the form of 5 gigliati. The reasonable interpretation of such a change is that the stavraton existed in 1337 and had ceased to be current by 1353, but that 5 gigliati represented about the same value, perhaps a little more – one could not expect an exact equivalence, since the coins belonged to different monetary systems – but certainly not less. Gigliati are well-known silver coins of Naples-Provence which were current in Asia Minor in the 1350s. Since they weighed almost exactly 4g, and circulated in company with Turkish imitations only slightly inferior in weight and fineness, one would expect the stavrata of 1337 to have been coins weighing somewhere between 8g and 10g.

The coins commonly attributed to Andronicus IV in fact weigh about 8.5g. Their reattribution to Andronicus III would explain the immense stylistic difference between the two main groups of John V's coins, for one of these could be placed early in his reign, close to the coins of Andronicus III, and the other at its close fifty years later, for the second group closely resemble the coins of Manuel II. The fact of the initial coinage being short-lived would equally account for the changed terms of the treaty of 1353 and the absence of heavy silver coins from the financial records of Amadeus VI. The existence of such coins in the 1330s would also help to explain the absence of any gold hyperpyra struck in the name of Andronicus III alone. An initial lack of success in the introduction of a heavy silver coinage was a not infrequent occurrence in the fourteenth and fifteenth centuries, obvious examples being England, where the groat of 1279 was a failure and a penny multiple had to be reintroduced in 1351, and Castile, where the heavy denominations of Alfonso X (1252–84) were failures and the silver real was reintroduced a hundred years later under Peter the Cruel. On numismatic grounds, however, the attribution is difficult to accept: there is no hoard evidence to support it, for no stavrata were present in the two known silver hoards of the minority of John V; the heavy coins do not resemble in style or iconographic detail the basilica that certainly belong to Andronicus III; and one would not expect coins with a heavily bearded face so early in the reign of John V. The traditional attribution of the earliest

stavrata to Andronicus IV has therefore been retained here, though with the reservation that it may have to be revised in the future.

Stavrata of Andronicus (*LPC* 152<sup>1</sup>) and of the early type of John V (*LPC* 154<sup>2</sup>) are illustrated on Pl. 95, nos 1511 and 1510. The reverse shows the bust of the emperor, bearded and nimbate, wearing a tippet and a dome-shaped crown, in a double circle of inscription. That of Andronicus' coins, often incomplete, is +ΑΝΔΡΟΝΙΚΟC ΔΕCΠΟΤΙC Ο ΠΑΛΕΟΛΟΓΟC/ΘV XΑΡΙΤΙ ΒΑCΙΑΕVC ΤΩΝ ΡΩΜΕΟΝ, starting on the outside. Only some half-dozen specimens are known, all in poor condition, with at least three varieties of privy mark, one of them taking the form of circles surrounding the IC and XC. The very similar coins of John V, which are almost equally rare, begin with +ΙΘ instead of +ΑΝΔΡΟΝΙΚΟC, but starting on the inside. Both series weigh between 8 and 8.5 g.

Later in the reign of John V there is a marked deterioration of style [1512], and the inscription now starts on the outer circle, a practice continued under Manuel II and John VIII. This sometimes makes it difficult to say whether a particular coin is of Manuel or John, since parts of the outer circle of inscription are often missing, either as the result of clipping or of an initial irregularity in the shape of the flan.

Manuel II's stavrata (*LPC* 160<sup>1</sup>) are of the same pattern as those of John V, but the style is markedly rougher [1513]. They form two groups, one weighing between 8 and 8.5 g and the other about 1 g less. In the heavy series the word ΑVΤΟΚΡΑΤΟΡ follows ΠΑΛΛΙΟΛΟΓΟC in the inscription, the final ΒΑCΙΑΕVC ΤΩΝ ΡΩΜ (*eion*) being omitted. The weight reduction took place before 1399, since the half stavrata of John VII conform to the reduced standard. No full stavrata of John VII are known, and Manuel revived the denomination only in the last years of his reign, with privy marks that link up with those of John VIII.

There are, finally, John VIII's hyperpyra [1514], which were formerly confused with those of John V and John VII but are distinguished from these by their extremely slovenly fabric and lettering and by their much lower weight (*c.* 7 g). The letters of the inscription are so roughly formed that identifications have usually to be made on the basis of general appearance, not on the decipherment of the emperor's name. Only a few privy marks, usually involving simple pellets, a monogram of ΜΓ, a lambda or a lis, are known, despite the existence of several substantial hoards, and it is clear that changes were made only infrequently. The issue of coins in John VIII's name may have continued into the reign of Constantine XI, though since a half stavraton of the latter has recently come to light there may be full stavrata also.

Half stavrata are of two distinct types. One, much the rarer of the two, links a facing imperial bust with St Demetrius on horseback; the other links a similar imperial bust with one of Christ, the resulting coin being a miniaturized version of the full stavraton without the second circle of inscription. Neither type is known for 'Andronicus', but the others are known with the names of either John or Manuel. The latter present no problem, but there is still uncertainty over the attribution of those in the name of John. For the coins with St Demetrius we have no hoard evidence; this in itself suggests that they should be attributed to

John V and not, as is customary, to John VII. Coins of John with a bust of Christ fall stylistically into two quite separate groups, the first of good style and high weight and the second of poor style and low weight. The coins of good style, all with the privy mark CII, are found mixed in hoards with coins of Manuel of high weight and are best assigned to John VII; the coins of poor style belong to John VIII.

On the basis of these assumptions the sequence of half stavrata may be summarized as follows.

1. Coins of John V (+ IΘENX etc.) with St Demetrius on horseback (*LPC* 186<sup>1</sup>, as John VII [1515]), weighing *c.* 4 g.
2. Coins of Manuel of similar type, sometimes with a Palaeologid monogram in the field (*LPC* 162<sup>3</sup> [1516]). There are several varieties, with the cross sometimes in Manuel's left hand and sometimes in his right, and St Demetrius sometimes riding to the left, sometimes to the right. These presumably belong to the 1390s, before Manuel's journey to Europe.
3. Coins of John VII with a facing bust of Christ (cf. *LPC* 172<sup>2</sup> as John VIII).
4. Similar coins of Manuel (*LPC* 160<sup>2</sup>) but forming two groups, a heavy group of *c.* 3.7 g [1517] with inscription *Basileus o Paleologos*, and a lighter group (*c.* 3.5 g) [1518] with inscription *En Christo to Theou pistos Bas (ileus)*, variously abbreviated.
5. Similar coins of John VIII (*LPC* 172<sup>2</sup>) [1519], markedly inferior in style and weight (*c.* 3.6 g) to the earlier ones of John VII and with the same series of sigla (two lis, monogram of gamma and kappa, etc.) as are found on the full stavrata of John VIII.

No quarter stavrata were struck, presumably because Venetian grossi filled any need that may have been felt for coins weighing *c.* 2 g. The pattern of silver denominations in the new system was instead completed by the one-eighth stavraton, a coin weighing 1 g or a little less and known for all the rulers save Constantine XI. The normal type is a bust of Christ on the obverse and one of the emperor on the reverse, but since the emperor's name is often reduced to no more than a few barely legible strokes it is difficult to distinguish coins of one ruler from those of another. Some coins of John V [1520] have the inscription following the whole circumference, running even below the bust (*LPC* 154<sup>2</sup>), which when it occurs provides firm identification, and ones with CII as privy mark can be attributed to John VII. Manuel's coins sometimes have the imperial name vertically in the field (*LPC* 162<sup>4</sup>) but more generally it follows the circumference (*LPC* 162<sup>5</sup>). Coins of John VIII have virtually nothing legible at all ([1521]; *LPC* 174<sup>3</sup>).

The copper denominations of the period of the silver hyperpyron were two in number, one a medium-sized coin (tornese) about 18 mm in diameter and weighing some 2 g, the other (follaro) a very small one of about 12 mm and weighing under 1 g. Tornesi of Andronicus IV [1522] have on one side the emperor and St Demetrius on horseback and on the other a Palaeologan monogram. Those of John V have on the obverse the bust of the emperor holding a cross-sceptre in his right or left hand and on the other the standing figures of SS

Constantine and Helena holding a long cross with a very clearly marked diagonal 'step' (*LPC* 170<sup>2</sup>, as John VII [1523]). Some of the early tornesi of Manuel are similar (*LPC* 164<sup>7,8</sup>), while others revert to the St Demetrius type of Andronicus IV but with *MANOVHA ΔΕCΠIOTIC*, often blundered, as the inscription (*LPC* 162<sup>6</sup> [1524]). These were succeeded by coins having a half-figure of St George (*LPC* 164<sup>9</sup>), and these in turn by ones having an imperial bust and St Demetrius on horseback (*LPC* 164<sup>10</sup>), but since the last have no inscription it is impossible to say whether they are of Manuel or of John VIII. There are also anonymous tornesi, perhaps of Manuel during his period at Thessalonica, having on the obverse the emperor standing beside an elaborate shrine and on the reverse a representation of the martyrdom of St Demetrius (*LPC* 262<sup>5</sup> [1525]). The follari have usually a standing figure of the emperor and one of Christ in a mandorla [1526], or a facing imperial bust and a cross with four stars [1527]. Both types are known for Manuel (*LPC* 166<sup>11,12</sup>) and some of the first type of John VII (with *CTI*), but the correct attribution of the others (*LPC* 174<sup>4,5</sup>, as John VIII) remains uncertain. There is also a very rare type, probably of John V, with an imperial bust and a standing figure of St Demetrius (*LPC* 170<sup>3</sup>, as John VII).

# NOTES

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## 1 Byzantine coinage: general features

- 14 *Fineness of Byzantine gold coins*. Material mainly available in L. Brunetti, 'Nuovi orientamenti statistici nella monetazione antica', *RIN* lii–liii (1950–1), 7–8; C. Morriçon, 'La dévaluation de la monnaie byzantine au XI<sup>e</sup> siècle', in *Travaux et mémoires du Centre de recherche d'histoire et civilisation de Byzance* vi (1976), 32–40, and 'Du solidus à l'hyperpère: dévaluations et déclin de la monnaie d'or byzantine', *BCEN* xiv (1977), 65–76; Hendy 10–12.
- 14 'Parts'. George Pachymeres (Bonn edn 1835), II.493–4.
- 14 *Fineness of silver*. Morriçon, 'La dévaluation de la monnaie byzantine', 41–7; further information, based on material from DO and the BN, put at my disposal and that of Mme Morriçon by Professor Adon A. Gordus.
- 15 *Copper*. P. Grierson, 'Trace elements in Byzantine copper coins of the sixth and seventh centuries', in P. Berghaus and G. Hatz (eds) *Dona Numismatica Walter Hävernicks zum 23 Januar 1965 dargebracht* (Hamburg 1965), 29–35.
- 15 *Reddish colour*. Cassiodorus, *Variae* i.18.
- 15 *Roman pound*. Cf. *DOC* 2, 8, n.3. There is a large subsequent literature, usually trying to determine the weight far more precisely than the evidence warrants. Cf. J. Guey, 'Peut-on estimer la livre romaine au cg. près? Non', *RN*<sup>6</sup> xviii (1976), 110–14.
- 16 *Work on Byzantine mathematics*. Refs in *DOC* 3, 17, n.32.
- 16 *Follis and nummus reckonings*. P. Grierson, 'The *Tablettes Albertini* and the value of the solidus in the fifth and sixth centuries AD', *Journal of Roman Studies* xlix (1959), 73–80.
- 18 *Coin names*. For those of the ninth–eleventh centuries, see *DOC* 3, 44–62; for those of the twelfth and thirteenth, Hendy 26–38.
- 19 *Anna of Savoy*. L. Brunetti, 'Sulla quantità di monete d'argento emesso sotto Anna di Savoia, imperatrice di Bisanzio (1341–1347)', *RIN* lxxv (1963), 143–68. His estimate of an average of 1800 coins being struck per die is unacceptably small, and his conclusions are in any case vitiated by a serious underestimate of the number of die duplicates occurring in the sample.
- 19 *Alexius I, Theophilus*. D. M. Metcalf, *Coinage in the Balkans, 820–1355* (Thessalonica 1965), 82–3, and 'How extensive was the issue of folles during the years 775–820?', *Byzantion* xxxvii (1967), 288–95. For other estimates by Metcalf, with sceptical comments, see *DOC* 3, 94–7.
- 21 *Minting of gold*. J. P. C. Kent, 'Gold coinage in the late Roman Empire', in R. A. G. Carson and C. H. V. Sutherland (eds) *Essays in Roman coinage presented to Harold Mattingly* (Oxford 1956), 190–204.

- 22 *Officinatores, etc.* E. Babelon, *Traité des monnaies grecques et romaines. Ière Partie. Théorie et doctrine I* (Paris 1901), 861–4.
- 23 *Officina letters added.* P. Grierson, 'Coins monétaires et officines à l'époque du Bas-Empire', *Gazette suisse de numismatique* xi (1961), 1–8, with the 'Note supplémentaire' by C. H. V. Sutherland, *ibid.* 73–5.
- 23 *Sharing of dies.* Grierson, 'Coins monétaires et officines'; a number are noted in the plates to *MIB*.
- 25 *Aistulf.* References in *DOC* 3, 93.
- 26 *Venice.* N. Papadopoli, *Le monete di Venezia I* (Venice 1893), 97, 175, 313 (cap. 9), 394.
- 27 *Obverse and reverse.* A. Vegliery and G. Zacos, 'New light on the solidus of Leo IV', *N. Circ.* lxxix (1961), 30–1.
- 28 *Hoard of basilica.* P. D. Whitting, 'Miliaria of Andronicus II and Michael IX. II', *N. Circ.* lxxx (1972), 324.
- 28 *Two brockages.* P. D. Whitting, 'A late Palaeologan hoard', *N. Circ.* lxxix (1971), 156.
- 29 *Imperial types.* C. Morrisson and G. Zacos, 'L'image de l'empereur byzantin sur les sceaux et les monnaies', in *La Monnaie: miroir des rois* (Paris 1978), 57–72. The classic work of A. Grabar, *L'empereur dans l'art byzantin* (Strasbourg 1936; reprinted London 1971), is not satisfactory in its treatment of the coins.
- 29 *Constantius II.* Ammianus Marcellinus xvi. 10.9–10, though this 'impassivity' was to some extent a *topos*.
- 29 *'My eternity'.* Ammianus Marcellinus xv. 1.3.
- 30 *Imperial costume and insignia.* *DOC* 2, 70–88; 3, 116–45; G. P. Galavaris, 'The symbolism of imperial costume as displayed on Byzantine coins', *MN* 8 (1958), 99–117; E. Piltz, 'Couronnes byzantines réfléchées dans les sources littéraires – tentative de typologie', *Byzantina* iii/iv (1974–5), 3–24.
- 30 *Mosaic of Justinian.* D. Talbot Rice, *The art of Byzantium* (London 1959), Pl. 58.
- 30 *Globus.* P. E. Schramm, *Sphaira, Globus, Reichsapfel* (Stuttgart 1958).
- 31 *Ivory of Constantine VII.* Talbot Rice, *The art of Byzantium*, Pl. 96.
- 31 *Modified loros.* See the Paris ivory of the marriage of Romanus II in Talbot Rice, *op. cit.*, Pl. 97.
- 32 *Italian writer.* F. Balducci Pegolotti, *La pratica della mercatura*, ed. A. Evans (Cambridge, Mass. 1936), 288 ('una [figura che] tiene uno pestello in mano').
- 34 *Nummus of Theodosius II.* S. Pl. V. 21.
- 35 *Victory.* See C. C. Vermeule, *Aspects of Victory on Roman coins, gems, and in monumental art* (London 1958); A. R. Bellinger and M. A. Berlincourt, *Victory as a coin type*, *NNM* 149 (New York 1962).
- 35 *Victory and angel.* The transformation was first noted by A. M. Friend in A. A. Vasiliev, *Justin the First* (Cambridge, Mass. 1950), 418–26. Cf. also A. Voirol, 'Die Wandlung der griechischen Siegesgöttin zum christlichen Engel nach antiken Münzbildern', *Jahresbericht der Gesellschaft Pro Vindonissa* (1943/4), 3–20.
- 35 *Roma and Constantinopolis.* J. M. C. Toynbee, 'Roma and Constantinopolis in late-antique art from 365 to Justin II', in G. E. Mylonas (ed.) *Studies presented to David Moore Robinson II* (Saint-Louis 1951), 261–77.
- 35 *Victory confused with Venus.* John of Ephesus iii.3.15.
- 35 *Cross on leaved base.* D. Talbot Rice, 'The leaved cross', *Byzantinoslavica* xi (1950), 72–81.
- 36 *Cross on Calvary.* A. Frolov, 'Numismatique byzantine et archéologie des Lieux Saints', *Archives de l'Orient chrétien* i (1948), 78–94.
- 36 *Representations of Christ.* Analysed in *DOC* 3, 146–69.
- 42 *Die-sinkers' errors.* *DOC* 1, 238/128 (coin of Justin II and Sophia with name of Justinian); P. Grierson, 'A coin of the emperor Phocas with the effigy of Maurice', *NC* iv (1964), 247–50.
- 42 *Use of obsolete dies.* W. Hahn, 'Coin mules and die economy in the Byzantine coinage of the sixth century', *N. Circ.* lxxxix (1973), 422.

## 2 The sixth century, 491–610

- 43 *General features*. *DOC* 1 made less attempt than *DOC* 2 and 3 to be comprehensive, and much supplementary material, mostly filling in gaps in date and officina series, was promptly published by a number of reviewers and collectors. Since these additions are incorporated in *MIB* I and II, their sources need not be listed here.
- 46 *Insurrectionary coins of 608–10*. Basic discussion in P. Grierson, 'The consular coinage of "Heraclius" and the revolt against Phocas of 608–610', *NC*<sup>6</sup> x (1950), 71–93. Despite sub-sequent objections by A. Cumbo, this attribution is now generally accepted. See *BNC* 245–52, and *MIB* II, 84–7, though with some divergences regarding mints.
- 46 *Procopius*. *Anecdota* xxv.11–12 and xxii.38.
- 47 *Solidus at c.14,000 nummi*. Grierson, 'The *Tablettes Albertini*' (see note to p. 16); see also *MIB* I, 21 ff.
- 49 *Monogram of Justin II and Sophia*. First correctly read by J. B. Bury, 'A misinterpreted monogram of the sixth century', *Mélanges offerts à M. Gustave Schlumberger* II (Paris 1924), 301–2. The coins were erroneously attributed to Justinian I by Sabatier, Wroth and Tolstoi.
- 50 *Six-solidus medallion*. P. Grierson, 'The Kyrenia girdle of Byzantine medallions and solidi', *NC*<sup>8</sup> xv (1955), 55–70. Hahn (*MIB* II, 59) considers that the imperial inscription dates it to 583, but the longer form may simply be a consequence of the greater space available.
- 51 *One-pound medallion*. Gregory of Tours, *Historia Francorum* VI, 2.
- 51 *Theoderic*. Best discussion by M. R. Alföldi, 'Il medaglione d'oro di Teodorico', *RIN* lxxx (1978), 133–41.
- 51 *Globus with cross*. Procopius, *De aedificiis* I, ii.11.
- 52 *Light-weight solidi*. Basic accounts are H. L. Adelson, *Light weight solidi and Byzantine trade during the sixth and seventh centuries* (New York 1957), and, on a series which he missed, E. Leuthold, 'Solidi leggeri da XXIII silique degli imperatori Maurizio Tiberio, Foca ed Eraclio', *RIN* lxii (1960), 146–54. Types are most fully listed in *MIB* I and II.
- 53 *Purpose of light-weight solidi*. *DOC* 2, 14–15; *MIB* I, 25–6.
- 53 *Thessalonica*. To the material in *MIB* must be added that in M. Oeconomides-Caramessini and J. Touratsoglou, 'The 1948 Thessaloniki hoard of 6th century Byzantine gold coins: a contribution to the study of the mint of Thessaloniki', *Quaderni ticinesi* VIII (1979), 289–312.
- 53 *Mints for gold*. To the material in the standard catalogues add D. Ricotti Prina, *La monetazione aurea delle zecche minori bizantine dal VI al IX secolo* (Rome 1972), though his mint attributions are for the most part fantasy, and the suggestions made in W. Hahn, 'More about the minor Byzantine gold mints from Tiberius II to Heraclius', *N. Circ.* lxxxvii (1979), 552–5.
- 54 *Italian gold*. To the material in *MIB* add M. D. O'Hara, 'A sixth century hoard of solidi of the mint of Ravenna', *Schweizer Münzblätter* xxix (1979), 58–63.
- 57 *Large medallions*. *MIB* I, Pls 1.15 and 5.7.
- 57 *Silver medallion of Anastasius*. K. Biró-Sey, 'Silver medallion of Anastasius I in the Numismatic Collection of the Hungarian Numismatic Museum', *Folia Archaeologica* xxvii (1976), 121–6.
- 58 *Carthage (1) coin of Maurice with monogram*: N. Fairhead, 'A new silver coin of Maurice Tiberius of Carthage', *N. Circ.* lxxxvii (1979), 440; (2) *coins of Theodosius*: H. Pottier, 'Un nouvel element dans l'analyse du monnayage byzantin d'argent frappé à Carthage au nom de Théodose', in Jean Elsen, *Liste 23* (July 1980), 8–12; (3) *coin of Heraclius with cross and four stars*: Münzen und Medaillen AG Basel, *List 406* (November–December 1978), no. 119 (0.25 g).
- 59 *Copper coinage*. To material in *DOC* and

- MIB* add A. Spaer, 'The Rafah hoard', *NC*<sup>7</sup> xviii (1978), 66–70.
- 60 *Five-yearly changes*. W. Hahn, *Emission und lustrum in der byzantinischen Münzprägung des 6. Jahrhunderts*, *Anzeiger d. österreichischen Akademie d. Wissenschaften, Philos.-hist. Klasse, Jahrgang 108* (1971), no. 21, with conclusions embodied in his *MIB*. Good discussions in English by D. M. Metcalf, 'New light on the Byzantine coinage system', *N. Circ.* lxxxii (1974), 14–15.
- 62 *Thessalonica*. Fullest survey by D. M. Metcalf, *The copper coinage of Thessalonica under Justinian I* (Vienna 1976), with elaborate stylistic study.
- 65 *Separation of half folles*. H. J. Berk, 'Definition of the Byzantine half folles of Maurice', *SCMB* (1978), 205.
- 65 *Cyzicus, pentanummium of Maurice*. Published by G. C. Bates in *MN* 16 (1970), 79–80.
- 65 *Antioch*. See also A. R. Bellinger, 'Byzantine notes. 4. The Antiochene coinage of Justinian', *MN* 12 (1966), 93–6, and G. C. Bates, 'Five Byzantine notes. A supplement to "The Byzantine coinage of Justinian"', *MN* 16 (1970), 69–79.
- 65 *Antiochene pentanummia*. P. Grierson, 'The monograms on late sixth century pentanummia of Antioch', *N. Circ.* lxxxiii (1975), 5; S. Bendall and I. T. Roper, 'Late sixth-century monogram pentanummia', *ibid.* 55.
- 70 *Carthage pentanummia*. N. Fairhead, 'Some pentanummia of Justinian I of Carthage', *N. Circ.* lxxxvii (1979), 342 (with II, B, or Π beside the Ε).
- 72 *Catania and Syracuse*. To the standard authorities now add Spahr 5–8.
- 73 *Cherson*. To A. V. Oreshnikov, 'Khersonovizantiiskiia moneti', *Trudy Moskovskogo Numismaticheskogo Obshchestva* iii (1905), 359–73, for long the standard edition of material, add now V. A. Anokhin, *Monetnoe delo Khersonesa* (Kiev 1977), 97–109, 156–7, and W. Hahn, 'The numismatic history of Cherson in early Byzantine times – a survey', *N. Circ.* lxxxvi (1978), 414–15, 471–2, 521–3, the latter with a full listing of the important articles (in Russian) by I. V. Sokolova and L. N. Byelova.
- 74 *Salona*. In addition to *DOC* and *MIB*, see I. Mirnik, 'Skupni nalaz bizantskog brončanog novca 6. stoljeća iz Kaštel Starog', *Vjesnik Arheološkog Muzeja u Zagrebu*<sup>3</sup> ix (1975), 161–6, describing a small hoard from Kaštel Stari on the bay of Salona.
- 75 *Moneta militaris imitativa*. In addition to *MIB* see W. Hahn, 'Eine Gruppe byzantinischer Imitativprägungen nach Typen des 6. Jahrhunderts – Falschmünzerei oder offiziöse Fabrikation?', in *Frappe et ateliers monétaires dans l'Antiquité et Moyen Age. Actes du Symposium, 30 janv. – 1 févr. 1975* (Belgrade 1976), 85–8.
- 77 *Pseudo-imperial coinages*. The best guide is P. Le Gentilhomme, 'Le monnayage et la circulation monétaire dans les royaumes barbares en Occident (Ve–VIIIe siècles)', *RN*<sup>5</sup> vii (1943), 46–112, and viii (1944), 13–59, though an extensive literature, superseding it on many points, has grown up since it was written.
- 78 *Ostrogothic coinage*. WV xxix–liv, 42–107; *MIB* I, 77–91, 128–31; F. F. Kraus, *Die Münzen Odovacars und des Ostgotenreiches in Italien* (Halle 1928); F. Stefan, *Die Münzstätte Sirmium unter den Ostgoten und Gepiden* (Halle 1925); J. P. C. Kent, 'The coinage of Theodoric in the names of Anastasius and Justin I', in R. A. G. Carson (ed.) *Mints, dies and currency. Essays in memory of Albert Baldwin* (London 1971), 67–74.
- 79 *Vandal coinage*. WV xv–xxix, 1–16; *MIB* I, 92–5, 131–2; T. V. Buttrey, in J. H. Humphrey (ed.) *Excavations at Carthage 1975 conducted by the University of Michigan* (Tunis 1976), 159–63, and in subsequent volumes; M. Troussel, 'Les monnaies vandales d'Afrique. Découvertes de Bou-Lilate et du Hamma', *Rec. des Notices et Mémoires de la Société archéologique de Constantine* lxxvii (1950), 147–94; E. Travaglini, *Thesaurus Massafrensis* (Brindisi 1974); J. Lafaurie,



- 'Trésor de monnaies de cuivre trouvé à Sidi Aïch (Tunisie)', *RN*<sup>6</sup> ii (1959–60), 113–30; C. Morrisson, 'Les origines du monnayage vandale', *Actes du 8ème Congrès international de numismatique, New York-Washington, 1973* (Paris-Basle 1976), 461–72; R. Turcan, 'Trésors monétaires trouvés à Tipasa', *Libyca* ix (1961), 213 ff.; Grierson, 'The *Tablettes Albertini*' (see note to p. 16). The chronology of the copper coinage is disputed, as is the system of values.
- 79 *Coins dated Year 4 or 5*. C. Courtois, 'Les monnaies de Gildon', *RN*<sup>5</sup> xvi (1954), 71–7. Mme Morrisson attributes them to Gunthamund, but I believe the attribution to Huneric to be correct.
- 79 *Suevi*. W. Reinhart, 'Die Münzen des Swebenreiches', *Mitteilungen der Bayerischen Numismatischen Gesellschaft* lv (1937), 151–90, and the work of Barral i Altet referred to below.
- 79 *Tremissis of Rechiar*. F. Mateu y Llopis, in *Ampurias* v (1943), 358.
- 80 *Early Visigothic coinage*. W. Reinhart, 'Die Münzen des tolosanischen Reiches der Westgoten' and 'Die Münzen des westgotischen Reiches von Toledo', *Deutsches Jahrbuch für Numismatik* i (1938), 107–35, and iii–iv (1940–1), 69–101; W. J. Tomasini, *The barbaric tremissis in Spain and southern France, Anastasius to Leovigild*, *NNM* 152 (New York 1964); X. Barral i Altet, *La circulation des monnaies suèves et visigothiques*, *Beihefte der Francia* 4 (Munich 1976).
- 80 *Franks*. M. Prou, *Les monnaies mérovingiennes* (Paris 1891), xiv ff.; A. de Belfort, *Description générale des monnaies mérovingiennes* V (Paris 1894); W. Reinhart, 'Die früheste Münzprägung im Reiche der Merowinger', *Deutsches Jahrbuch für Numismatik* ii (1939), 37–56.
- 81 *Marseilles*. J. Lafaurie, 'Monnaies de bronze marseillais du VI<sup>e</sup> siècle', *BSFN* xxviii (1973), 480–2; C. Brenot, 'Monnaies de cuivre du VI<sup>e</sup> siècle frappées à Marseille', in *Mélanges de numismatique, d'archéologie et d'histoire offerts à Jean Lafaurie* (Paris 1980), 181–8.
- 81 *Provençal imitations*. S. E. Rigold, 'An imperial coinage in southern Gaul in the 6th and 7th centuries?', *NC*<sup>6</sup> xiv (1954), 93–133; P. Grierson, 'The *Patrimonium in illis partibus* and the pseudo-imperial coinage in Frankish Gaul', *RBN* cv (1959), 95–111.
- 82 *Burgundy*. A. Ponton d'Amécourt, 'Excursion numismatique dans la Bourgogne', *Annuaire de la Soc. française de numismatique* i (1866), 112–17; J. Lafaurie, 'Le trésor de Gourdon (Saône-et-Loire)', *Bulletin de la Société nationale des Antiquaires de France* (1958), 61–76, and 'Les monnaies frappées à Lyon au VI<sup>e</sup> siècle', in *Mélanges de travaux offerts à Maître Jean Tricou* (Lyons 1972), 193–205.
- 82 *Lombards*. WV lv–lvii, 123–35, and three works of E. Bernareggi: *Il sistema economico e la monetazione dei Longobardi nell'Italia superiore* (Milan 1960); 'Le monete dei Longobardi nell'Italia padana e nella Tuscia', *RIN* lxxv (1963), 35–142; and 'Conclusioni sulle diverse fasi della monetazione longobarda', *RIN* lxxiii (1971), 135–53.

### 3 The Heraclian dynasty and its successors, 610–717

- 85 *Closure of mints*. M. F. Hendy, 'On the administrative basis of the Byzantine coinage c.400–900 and the reforms of Heraclius', *University of Birmingham Historical Journal* xii (1970), 129–54, esp. 147 ff.
- 85 *Coinage and economic changes*. Cf. P. Charanis, 'The significance of coins as evidence for the history of Athens and Corinth in the seventh and eighth centuries', *Historia* iv (1955), 163–72; G. Ostrogorsky, 'Byzantine cities in the early middle ages', *DOP* xiii (1959), 45–66, esp. 48–52; and E. Francès,

- 'La ville byzantine et la monnaie aux VIIe siècle', *Byzantinobulgarica* ii (1966), 3–14. Some of the assumptions involved in these studies are open to question. There are good observations in C. Foss, 'The Persians in Asia Minor and the end of Antiquity', *English Historical Review* xc (1975), 721–47.
- 85 *Gold coinage*. Descriptions of some recently discovered hoards: M. Kurum, 'Cücük Definesi: Constans II (Constantinus III) nin solidusları', *Türk Arkeoloji Dergisi* xx (1973), 79–90; C. Morrisson, 'Le trésor byzantin de Nikertai', *RBN* cxviii (1972), 29–91.
- 86 *Leontius*. The credit for distinguishing between the coins of Leontius and those of Leo III, which were confused by Wroth and all previous writers, belongs to L. Lafranchi, 'La numismatica di Leonzio II', *Numismatica* iv (1938), 73–4; v (1939), 7–15, 91–2; vi (1940), 20–2.
- 90 *Design of the coins*. On the coin art of this period: M. S. Restle, *Kunst und byzantinische Münzprägung von Justinian I. bis zum Bilderstreit* (Athens 1964).
- 92 *Overstriking on the tetrarchy*. To *DOC* 2, 629/8b.3 add those noted by G. D. R., 'Three overstrikes of Leontius', *N. Circ.* lxxix (1971), 7, and S. Bendall, 'Constans II on Constantine I', *N. Circ.* lxxxiii (1975), 118.
- 93 *Irregular gold coins*. W. Hahn, 'Some unusual gold coins of Heraclius and their mint attribution', *N. Circ.* lxxxv (1977), 536–9, and 'The numismatic history of Cherson' (see note to p. 73), 521.
- 93 *Solidi of uncertain mints*. W. Hahn, 'Another Heraclius die identity', *N. Circ.* lxxiv (1976), 235. See also M. Kampmann and C. Morrisson, 'Regravure d'un coin de solidus d'Héraclius à Constantinople', *BSFN* xxx (1975), 720–2.
- 95 *Added beards*. P. Grierson, 'Die alterations and imperial beards', *N. Circ.* lxx (1962), 159–60.
- 100 *Light-weight coin of Justinian II*. M. D. O'Hara, 'A light-weight solidus of Justinian II?', in D. J. Crowther, *Coin List* (1969), no. 4, prelims.
- 101 *Semissis with Christogram*. M. D. O'Hara, 'A new semissis of Constans II', in *Coins and Antiquities, Coin List* (1977), no. 54, prelims, the attribution to Constans being incorrect. This coin is now at DO.
- 102 *Semissis of Anastasius*. P. Protonotarios, 'A semissis of the emperor Artemius Anastasius', *N. Circ.* lxxix (1971), 363.
- 103 *Silesian hoard*. P. Radomsky, 'Byzantské mince z pokladu v Zemianském Vrbovku', *Pamatky archeologické* xlv (1953), 109–22.
- 103 *Hexagrams*. The substantial monograph of P. Yannopoulos, *L'Hexagramme. Un monnayage byzantin en argent du VIIe siècle* (Louvain 1978), is disappointing; see the reviews in *RN*<sup>6</sup>, xx (1978), 192–7, *N. Circ.* lxxxvii (1979), 345, and *Jahrbuch für Numismatik und Geldgeschichte* xxviii–xxix (1978–9), 158–63.
- 103 *First struck in 615*. The proposal by K. Ericsson to redate the coin to 626 and connect the type with the overturning of Sasanian fire-altars is unconvincing ('Revising a date in the *Chronicon Paschale*' and 'The cross on steps and the silver hexagram', *Jahrbuch der österreichischen byzantinischen Gesellschaft* xvii (1968), 17–28, 149–64).
- 104 *Hexagrams of Constans II and Constantine IV*. For a very important Romanian hoard, see B. Mitrea, 'Tezaurul de hexagrame bizantine de la Prișeaca (jud. Olt)', *SCN* vi (1975), 113–25. In Caucasian hoards they are mixed with Sasanian dirhems. See M. I. Kamer and K. V. Golenko, 'Leninskii klad sasanidskikh i vizantiiskikh monet (1956 g)', *VV*<sup>2</sup> xix (1961), 172–93.
- 105 *Possible loss of silver*. P. Grierson, 'The monetary reforms of 'Abd al-Malik: their metrological basis and their financial repercussions', *Journal of the Economic and Social History of the Orient* iii (1960), 241–64.
- 106 *Supposed activity of Antioch*. J. C. Balty, 'Un follis d'Antioche daté de 623/4 et les campagnes syriennes d'Heraclius', *Schweizer Münzblätter* xx (1970), 4–12; G. E. Bates, 'Five Byzantine notes. 3. The Antioch mint under Heraclius', *MN* 16 (1970), 80–2; H. Pottier, 'Deux folles

- d'Héraclius et Héraclius Constantin datés des années XII et XIV', *BCEN* xiv (1977), 51–9, and 'L'atelier d'Antioche sous Héraclius', *BCEN* xvi (1979), 66–81; W. Hahn, 'Minting activity in the diocese of Oriens under Heraclius', *N. Circ.* lxxxv (1977), 307–8.
- 109 *Class 3.* H. Pottier, 'Classification des demi-folles frappés à Constantinople sous Heraclius', in Jean Elsen, *Liste 14* (April 1979), 19–22, and *Liste 17* (September 1979), 19.
- 109 *Class 4.* *DOC* description corrected in P. Grierson, 'Heraclius' half-follis, Class 4. An anomalous type', *N. Circ.* lxxxiv (1976), 51.
- 110 *Pentanummia.* *BNC* Pl. XLIV, 91 (profile); M. D. O'Hara, 'A new (Constantinopolitan) pentanummi of Heraclius', *Schweizer Münzblätter*, xxiv (1974), 8–9.
- 110 *Heraclonas attribution.* Corrected by G. E. Bates, 'Constans II or Heraclonas? An analysis of the Constantinopolitan folles of Constans II', *MN* 17 (1971), 141–61.
- 111 *Further follis of Year 3.* S. Bendall, 'A new follis of Constans II', *N. Circ.* lxxviii (1970), 448, and S. Bendall and P. J. Donald, 'Further light on a new follis of Constans II', *N. Circ.* lxxxiii (1975), 427.
- 111 *Follis with bearded bust.* A. Wenninger, 'INPER CONST—Ein Beitrag zur Follisprägung des Konstans II', *Jahrbuch für Numismatik und Geldgeschichte* xxvii (1977), 75–8, and notes by G. Gromotka and E. L. Denijs in *N. Circ.* lxxxviii (1980), 313, 405.
- 114 *Decanummia.* H. J. Berk, 'Decanummia of Constantine IV', *SCMB* (1977), 244–7.
- 114 *Constantine IV, decanummia.* M. D. O'Hara, 'Two unpublished decanummia of Constantine IV AD 668–685', in *Coins and Antiquities, Coin List* (1971), no. 1, prelims; Berk, 'Decanummia of Constantine IV'.
- 115 *Letter R.* P. Grierson, 'La lettre R au revers de folles de Justinien II', *BCEN* xi (1974), 30–3; H. Weller, 'Tiberius in monogram—Я', *N. Circ.* lxxx (1972), 411.
- 116 *Class 4.* Specimen of Year 13: M. D. O'Hara, 'An unusual follis of Thessalonica', in D. J. Crowther, *Coin List* (1969), no. 6, prelims.
- 117 *Alexandria.* This coinage was put in order by J. R. Phillips, 'The Byzantine bronze coinage of Alexandria in the seventh century', *NC*<sup>7</sup> ii (1962), 225–41.
- 117 *Milne.* See J. G. Milne, 'Report on the coins found at Antinoe in 1914', *NC*<sup>6</sup> vii (1947), 108–14.
- 118 *Thirty-nummus piece of Year 30.* G. E. Bates, 'Five Byzantine notes. 5. An addition to the 30 nummi coinage', *MN* 16 (1970), 84–5.
- 119 *Transitional Byzantine-Arab coinage in Egypt.* G. C. Miles, 'The early Islamic bronze coinage of Egypt', in H. Ingholt (ed.) *Centennial Publication of the American Numismatic Society* (New York 1958), 471–502; H. Amin Awad, 'Seventh century Arab imitations of Alexandrian dodecanummia', *MN* 18 (1972), 113–17.
- 120 *Cherson, Bosporos.* Hahn, 'The numismatic history of Cherson' (see note to p. 73), 521–3.
- 120 *Bosporos countermarking.* K. Golenko, 'Gegenstempel auf Chersoner Münzen des Maurikios Tiberios', *HBN* xviii/xix (1964/5), 5–12.
- 120 *Seleucia, etc.* G. E. Bates, 'A Byzantine hoard from Coelesyria', *MN* 14 (1968), 76–81, and 'Five Byzantine notes. 4. The third officina at Seleucia', *MN* 16 (1970), 82–4. Also the article of Hahn referred to above, note to p. 75).
- 122 *Carthage.* C. Morrisson, 'Nouvelles monnaies byzantines inédites de l'atelier de Carthage (VIIe siècle)', *BSFN* xxv (1970), 597–601, and her preliminary account of the Rougga hoard in the section on 'Numismatique byzantine' in *Annuaire de l'École pratique des Hautes Études, IVe section: sciences hist. et philologiques* (1974–5), 457–60; Hahn, 'Some unusual gold coins of Heraclius' (see note to p. 93). The article of P. D. Whitting, 'A seventh century hoard at Carthage', *NC*<sup>7</sup> vi (1966), 225–33, contains important material.
- 122 *Sardinia.* G. Graziano and G. Campazzi, *Contributo all'inquadrimento storico della monetazione sardo-bizantina* (Sassari 1975).

- 122 *Three-figure solidus*. Morrisson, 'Nouvelles monnaies', 597–8, no. 1, and related coins listed and illustrated by Hahn.
- 123 *Semisses*. Another specimen (in addition to the BM one) in Morrisson, *ibid.*, 600, no. 2.
- 124 *Heraclonas solidus*. *ibid.*, 598–9, no. 2.
- 125 *Justinian II*. C. Morrisson and M. Kampmann, 'Le dernier solidus byzantin frappé à Carthage', *BSFN* xxxiv (1979), 514–16.
- 126 *Half unit*. Münzen und Medaillen A. G. Basel, *Liste 406* (November–December 1978), no. 119.
- 126 *AR of Justinian*. Morrisson, 'Nouvelles monnaies', 600–1, no. 4; N. Fairhead, 'A new silver coin of Justinian II of Carthage', *NC* xix (1979), 210–11.
- 128 *Half follis of Class 4*. J. Van Cleef, 'Un demi-follis de Justinien II – Atelier de Carthage', *BSFN* xxxii (1977), 196–7.
- 129 *Sicily*. See Spahr. Current views on Sicilian coinage date essentially from the publication of D. Ricotti Prina, 'La monetazione siciliana nell'epoca bizantina', *Numismatica* xvi (1950), 26–60. See also Hahn, 'Some unusual gold coins of Heraclius' (note to p. 93).
- 129 *Further material*. J. M. Fagerlie, 'A Byzantine "Sicilian" hoard', in D. K. Kouymjian (ed.) *Near Eastern numismatics, iconography, epigraphy and history, Studies in honor of George C. Miles* (Beirut 1974), 175–83.
- 136 *Dating of Constans II fractional AE*. S. Bendall, 'La datation des monnaies de bronze de Constant II à Syracuse', *BSFN* xxx (1975), 834–5, and 'A new Sicilian half follis of Constans II', *N. Circ.* lxxxix (1981), 38, 41. Cf. also H. Pottier, 'Un ensemble de bronzes byzantins provenant de Sicile', in Jean Elsen, *Liste 19* (December 1979), 3–4, and *Liste 21* (March 1980), 5–6.
- 137 *Follis with two standing figures*. S. Bendall, 'A new Sicilian follis of the second reign of Justinian II', *N. Circ.* lxxxvi (1978), 579.
- 139 *Mezezius*. Numismatik Lanz (Munich), Auction 14 of 17.4.78, lot 497. Other specimens, unidentified, in M. D. O'Hara, 'An obverse die link and unrecorded officina mark for the rare "Balkan mint" (?) gold issue of Constantine IV, AD 668–685', in *Coins and Antiquities, Coin List* (1970), no. 5, prelims.
- 139 *Luni*. U. Mazzini, 'Di una zecca di Luni dei secoli sesto e settimo finora ignorata', in *Miscellanea di Studi storici in onore di Giovanni Sforza* (Lucca 1920), 620–39, and 'Note di sfragistica e numismatica. Nuova moneta di Luni', *Giornale storico della Lunigiana*<sup>2</sup> xii (1932), 118–23.
- 142 *Constantine IV, AE of Ravenna*. E. Leuthold, 'Zwei mit Kaiserjahren und Indiktionen datierte Folles von Konstantinos IV', *BZ* lxi (1968), 303.
- 143 *Half tremissis of Rome*. H. K. Limbourg, 'A half-tremissis of Tiberius III Absimarus, AD 698–705', *N. Circ.* lxxxvi (1978), 4.
- 143 *Billon 30-nummus pieces*. O. Murari, 'Monete di trenta nummi dei secoli VII ed VIII della zecca di Roma', *Quaderni ticinesi di numismatica e antichità classiche* vi (1977), 317–39.
- 144 *Arab-Byzantine coinage*. J. Walker, *A catalogue of the Arab-Byzantine and Post-Reform Umayyad coins [in the British Museum]* (London 1956), is the basic work, though its chronology and identifications of Byzantine prototypes require some emendation. See also G. C. Miles, 'The iconography of Umayyad coinage', *Ars Orientalis* iii (1959), 207–13, and 'The earliest Arab gold coinage', *MN* 13 (1967), 205–29; N. M. Lowick, 'Early Arab figure types', *N. Circ.* lxxviii (1970), 90–1; M. L. Bates, 'The "Arab-Byzantine" bronze coinage of Syria: an innovation of 'Abd-al-Malik', in *A colloquium in memory of George Carpenter Miles* (New York 1976), 16–37; Anna M. Balaguer Prunes, *Las emisiones transicionales árabe-musulmans de Hispania* (Barcelona 1976); and the article of Grierson cited in the note to p. 105.
- 147 *Dating of transitional gold*. The three-figure transitional type is dated to c. 640 by J. Lafaurie in the belief that the specimen in the BN came from the Buis hoard of Mero-

vingian tremisses ('Trois nouvelles pièces de la trouvaille de Buis, com. Chissey-en-Morvan, Saône-et-Loire', *BSFN* xiv (1959),

295–7). This is quite uncertain, however, and I believe a later date to be correct.

#### 4 The Isaurian dynasty and its successors, 717–820

- 150 *Iconoclasm*. A. Grabar, *L'Iconoclisme byzantin: dossier archéologique* (Paris 1957); P. D. Whitting, 'Iconoclasm and the Byzantine coinage', *University of Birmingham Historical Journal* xii (1971), 158–63.
- 154 *Miliaresia overstruck on dirhems*. G. C. Miles, 'Byzantine miliaresion and Arab dirhem: some notes on their relationship', *MN* 9 (1960), 189–218.
- 155 *Recutting of officina letters*. S. Bendall, 'Constantine V – an altered die', *N. Circ.* lxxxv (1977), 304 (©C recut as S).
- 158 *Inscriptions*. G. Zacos and A. Veglery, 'Enigmatic inscriptions on Byzantine coins', *N. Circ.* lxiii (1955), 107–11, 166; 'New light on the solidus of Leo IV', *N. Circ.* lxix (1961), 30–1.
- 158 *Solidi of Constantine VI*. Mme Morrisson, *BNC* 189–93, proposes a different chronology, attributing my Class II to 790 (January–September) and those showing Irene without a globus cruciger to 790–7.
- 160 *Distinction between miliaresia of Leo III and Leo IV*. A. Veglery and G. Zacos, 'The miliaresion of Leo III', *N. Circ.* lxxi (1963), 162–4.
- 162 *Class I bis*. P. Grierson, 'A new early follis type of Leo III (718)', *NC*<sup>7</sup> xiv (1974), 75–7.
- 162 *Follis, Class 2, variety with R*. See article cited above, note to p. 115.
- 164 *Copper coinage of Leo IV and his successors*. Metcalf, 'How extensive was the issue of folles during the years 775–820?' (see note to p. 19), 270–310.

#### 5 The Amorian and early Macedonian dynasties, 820–969

- 176 *Senzaton*. V. Laurent, 'Τὸ σενζάτον. Nom de monnaie au Xe siècle', *REB* xii (1954), 193–7, with supplement in *REB* xiv (1956), 205–7.
- 176 *Pantocrator*. Representations of Christ on the coins are analysed in detail in *DOC* 3, 146–69.
- 176 *Portraiture*. See *DOC* 3, 142–5.
- 176 *Modified loros*. See *DOC* 3, 120–2, and above, p. 31. Mme Morrisson applies to it the term *clapotos loros* on the assumption of its identity with the *κλαπωτά* referred to in Pseudo-Codinus and other texts.
- 176 *Pope Nicholas I*. See *DOC* 3, 456, n. 17.
- 177 *Chronology of Theophilus*. To the discussion in *DOC* 3, 406 ff., add W. T. Treadgold, 'The problem of the marriage of the emperor Theophilus', *Greek, Roman and Byzantine Studies* xvi (1975), 325–41.
- 179 *Coronation of Constantine VII*. Corrected from 911, the date customarily given (see *DOC* 3, 508, n. 3).
- 179 *Solidus of Constantine VII*. The classes are numbered as in *DOC*. Slightly different dates for some classes are proposed by T. E. Gregory, 'The gold coinage of the emperor Constantine VII', *MN* 19 (1974), 87–118.
- 181 *Basil I, miliaresia*. D. M. Metcalf, 'The Antalya hoard of miliaresia of Basil I', *NC*<sup>7</sup> xvii (1977), 114–25.
- 182 *South Italian hoard*. E. Leuthold, 'Tesoretto di monete bizantine dei secoli IX e X nel Museo Nazionale di Taranto', *RIN* lviii (1956), 31–5.
- 182 *Folles of Michael II*. D. M. Metcalf, 'The folles of Michael II and of Theophilus before his reform', *HBN* xxi (1967), 21–34.
- 182 *Folles of Theophilus*. Attributions proposed

- by D. M. Metcalf in his articles, 'The new bronze coinage of Theophilus and the growth of the Balkan themes', *MN* 10 (1962), 81–98; 'The reformed folles of Theophilus: their styles and localization', *MN* 14 (1968), 121–53; and 'Links between stylistic groups among the reformed folles of Theophilus', *N. Circ.* lxxxiv (1976), 6–7.
- 183 *Half follis*. Metcalf believes this to be a follis struck at Thessalonica to a lower (provincial) weight standard.
- 183 *Basil I*. A different and much more complex classification is proposed by D. M. Metcalf, 'Ražba follu Basilia I. a organizace jejich mincoven', *Numismatický Sborník* ix (1966), 95–127, with English summary.
- 184 *Seal of Romanus I*. V. Laurent, 'Un portrait inédit de Romain Ier Lecapène', in *Festschrift W. Sas-Zaloziecky zum 60. Geburtstag* (Graz 1956), 102–8.
- 184 *Follis of Christopher*. Mme Morrisson believes it to be false (*BNC* 576, and 827, n. 1).
- 184 *Theophano*. See Morrisson and Zacos, 'L'image de l'empereur byzantin' (see note to p. 29), 59, as against *DOC* 3, 579.
- 184 *Nicephorus II*. Cf. M. D. O'Hara, 'A follis of Nicephorus II Phocas', *SCMB* (1973), 120–3, on details of the designs.
- 186 *Coins attributed to Naples*. See *DOC* 3, 85–7.
- 186 *Sicily*. To the material in *DOC* now add Spahr 79–95.
- 187 *Cherson*. Basic study by Oreshnikov (see note to p. 73). For some proposed re-attributions see I. V. Sokolova, 'Kheroneskie moneti X v. s portretame imperatorov', *Numizmatika i epigrafika* v (1965), 116–20. See also Anokin, op. cit. (note to p. 73), 110–27, 159–66.
- 187 *Analysis*. J. and L. Sabatier, *Production de l'or, de l'argent et du cuivre chez les anciens* (St Petersburg 1850), 82–3.

## 6 The later Macedonians and their successors, 969–1081

- 193 *Coin types*. *DOC* 3, 107–76, with detailed analysis of the representations of the emperors and of Christ.
- 194 *Thorakion*. *DOC* 3, 125, and W. H. Rudt de Collenberg, 'Le Thorakion. Recherches iconographiques', *Mélanges de l'École française de Rome: Moyen Âge, Temps modernes* lxxxiii (1973), 263–361.
- 194 *Greek letters*. G. Zacos and A. Vegler, 'C for Σ on coins of the eleventh century', *N. Circ.* lxxviii (1960), 154–7.
- 194 *Coin names*. *DOC* 3, 47–62; R. P. Blake, 'Some Byzantine accounting practices illustrated from Georgian sources', *Harvard Studies in Classical Philology* li (1940), 11–33; C. Morrisson, 'Le michaèlaton et les noms des monnaies à la fin du XIe siècle', *Travaux et mémoires du Centre de recherche d'histoire et civilisation de Byzance* iii (1968), 369–74.
- 195 *Scyphate*. P. Grierson, 'Numi scyphati. The story of a misunderstanding', *NC* 7 xi (1971), 253–60.
- 195 *Imitations*. *DOC* 3, 101–5. The role of Harald Hardrada's treasure is disputed.
- 195 *Arabic countermarks*. Fullest treatment in N. M. Lowick, S. Bendall and P. D. Whitting, *The 'Mardin' hoard. Islamic countermarks on Byzantine folles* (London 1977).
- 196 *Tetarteron*. *DOC* 3, 28–39, where the views of Lopez, Ahrweiler and others are examined.
- 197 *Debasement*. To the discussion in *DOC* 3, 39–44, add Morrisson, 'La dévaluation de la monnaie byzantine au XIe siècle' (see note to p. 14), 3–47, which includes much additional information on the fineness of the coins.
- 197 *Concavity*. C. Morrisson, 'La concavité des monnaies byzantines', *BSFN* xxx (1975), 786–8.
- 199 *Silver pattern*. D. Gaj-Popović, 'Une monnaie byzantine inconnue trouvée aux environs de Prilep', in *Frappe et ateliers monétaires dans l'Antiquité et Moyen Âge*

- (Belgrade 1976), 99–103; P. Grierson, 'A pattern nomisma of Basil II (976–1025)', *N. Circ.* lxxxv (1977), 97.
- 199 *Romanus III*. In addition to *DOC*, see M. D. O'Hara, 'A rare histamenon of Romanus III Argyrus AD 1028–1034', *SCMB* (1971), 321–4.
- 199 *Thessalonican histamenon*. M. F. Hendy, 'Michael IV and Harold Hardrada', *NC*<sup>7</sup> x (1970), 187–97.
- 200 *Constantine IX*. Comments additional to *DOC* in M. D. O'Hara, 'An introduction to the gold coinage of Constantine IX Monomachus AD 1042–1055', *SCMB* (1971), 46–51.
- 201 *Russian imitations*. K. V. Golenko, 'Die Tamaner Gruppe der Nachahmungen byzantinischer Miliarsesia', in P. Berghaus and G. Hatz (eds) *Dona Numismatica Walter Hävernack zum 23 Januar 1965 dargebracht* (Hamburg 1965), 87–94.
- 201 *Anonymous miliarsesion*. P. Grierson, 'A misattributed miliarsesion of Basil II', *Mélanges G. Ostrogorsky II* (Belgrade 1963), 111–16.
- 201 'Silver famine'. R. P. Blake, 'The circulation of silver in the Moslem East down to the Mongol epoch', *Harvard Journal of Asiatic Studies* ii (1937), 291–328. A new study is badly needed.
- 201 *Oxarve hoard*. *DOC* 3, 736–7, supplementing an article by T. J. Arne.
- 201 *Silver finenesses*. Figures in Morrisson, 'La dévaluation de la monnaie byzantine au XI<sup>e</sup> siècle' (see note to p. 14), 41–7.
- 203 *Orthodoxos*. V. Laurent, 'Le titre d'empereur orthodoxe et le sens de son emploi en numismatique byzantine', *Cronica numismatică și arheologica* (1946), 34–41.
- 204 *Pattern histamenon*. *DOC* 3, 820/15 (as half follis). DO has since acquired another specimen.
- 204 *Anonymous Folles*. A. R. Bellinger, *The Anonymous Byzantine bronze coinage*, *NNM* 35 (New York 1928); P. D. Whitting, 'The Anonymous Byzantine bronze', *NC*<sup>6</sup> xv (1955), 89–99; M. Thompson, *The Athenian Agora: Vol. II, Coins from the Roman through the Venetian period* (Princeton 1954), 109–15.
- 205 *Hoard of counterfeits*. T. Gerasimov, 'Fausses monnaies antiques de l'empereur byzantin Jean Zimiscès', *Bull. de l'Institut archéologique bulgare* xvii (1950), 313–15.
- 205 *Dating of Class A1 queried*. W. E. Metcalf, 'Early Anonymous Folles from Antioch and the chronology of Class A', *MN* 21 (1976), 109–28.
- 206 *Distribution of varieties*. D. M. Metcalf, 'Interpretation of the Byzantine "Rex Regnantium" folles of Class "A", c. 970–1030', *NC*<sup>7</sup> x (1970), 199–219 (critically examined by W. E. Metcalf, op. cit.), and 'Byzantine coins minted in central Greece under Basil II', *Nomismatika Chronika* iii (1974), 21–5.
- 209 *C for K*. See note to p. 194.
- 209 *Coin of Nicephorus*. P. Grierson, 'Nicephorus Bryennius or Nicephorus Basilacius?', *N. Circ.* lxxxiv (1976), 2–3.

## 7 The Comneni and Angeli, 1081–1204

- 211 *General features*. Hendy, chapters 1–10. This section is almost entirely dependent on Hendy's work, either here or in his draft for *DOC* 4, and where no further references are given it may be assumed that I have relied on it. There are very clear summaries in *BNC*. On the economic background, see M. F. Hendy, 'Byzantium 1081–1204: an economic reappraisal', *Trans. Roy. Hist. Soc.*<sup>5</sup> xx (1970), 31–52; J. Herrin, 'The collapse of the Byzantine Empire in the 12th century: a study of medieval economy', *University of Birmingham Historical Journal* xii (1971), 188–203; P. Tivčev, 'Sur les cités byzantines aux XI<sup>e</sup>–XII<sup>e</sup> siècles', *Byzantino-bulgarica* i (1962), 145–82; and S. Vryonis, *The decline*

- of medieval Hellenism in Asia Minor and the process of Islamization from the 11th through the 15th century* (Berkeley-Los Angeles 1971).
- 214 *Gap*. A modern attempt to fill this with a crude forgery imitated from a Venetian grosso is described by T. Bertelè, 'Una falsa moneta di Isacco II ed Alessio IV (1203–1204)', *Revue des études sud-est européennes* vii (1969), 35–8. An unusual billon trachy which is probably a later imitation has also been doubtfully attributed to the joint reign by M. D. O'Hara, 'A billon trachy with the legend of Isaac Angelus', in *Coins and Antiquities*, *Coin List* (1971), no. 3, prelims.
- 215 *Analyses*. Hendy 10–13, supplemented by further information provided by Professor A. A. Gordus from material at DO, in the BN, and elsewhere. For analyses of billon trachea: M. F. Hendy and J. A. Charles, 'The production techniques, silver content and circulation history of the twelfth-century Byzantine trachy', *Archaeometry* xii (1970), 13–21.
- 216 *Choniates, and records of 1190 and 1199*. Hendy 21–3.
- 217 *Typicon*. A. Frolov, 'Les noms de monnaies dans le Typicon du Pantocrator', *Byzantinoslavica* x (1949), 241–53.
- 217 *Michaelaton*. Morrisson, 'Le michaelaton et les noms des monnaies' (see note to p. 194).
- 218 *Abbreviation for 'three-header'*. F. Dölger, 'Chronologisches und Prosopographisches zur byzantinischen Geschichte des 13. Jahrhunderts', *BZ* xxvii (1927), 296, n. 4. Cf. in general V. Laurent, 'Les monnaies tricéphales de Jean II Comnène', *RN*<sup>5</sup> xiii (1951), 97–108.
- 219 *Lead coins*. Not covered in Hendy, as at DO they had been classified with the seals. They were transferred to the coin collection in 1976, and will be included in *DOC* 4.
- 220 *Hagiosoritissa*. T. Bertelè, 'La Vergine Aghiosoritissa nella numismatica bizantina', *REB* xvi (1958), 233–4.
- 221 *Bellinger*. A. R. Bellinger, 'Three hoards of Byzantine bronze coins', *Greek and Byzantine Studies* i (1958), 163–71, esp. 165–7.
- 221 *Metcalf*. E.g. D. M. Metcalf, 'The reformed gold coinage of Alexius I Comnenus', *HBN* xvi (1962), 271–84.
- 222 *Adrianople*. Morrisson, *BNC* 671.
- 222 *Brauron hoard*. D. M. Metcalf, 'The Brauron hoard and the petty currency of central Greece', *NC*<sup>7</sup> iv (1964), 225–58.
- 222 *Schindler*. L. Schindler, 'Ein byzantinischer Münzfund', *Mitteilungen d. Numismat. Gesellschaft in Wien* xv (1923), 229, 232.
- 222 *Metcalf*. D. M. Metcalf, *Classification of Byzantine stamena in the light of a hoard found in southern Serbia*, *Situla* 9 (Ljubljana 1967), and in other articles.
- 224 *Dimitrati*. Morrisson in her review of Hendy: *NC*<sup>7</sup> xi (1971), 358.
- 228 *Trapezuntine coinage*. This section is based entirely on S. Bendall, 'The mint of Trebizond under Alexius I and the Gabrades', *NC*<sup>7</sup> xvii (1977), 126–36. For the political background: A. Bryer, 'A Byzantine family: the Gabrades, c. 979–c. 1653', *University of Birmingham Historical Journal* xii (1970), 164–87, and J. Hoffmann, *Rudimente von Territorialstaaten im Byzantinischen Reich 1071–1210* (Munich 1974), 21–7.
- 228 *Corinth finds*. T. L. Shear, 'Excavations in the Theatre district and tombs of Corinth in 1928', *American Journal of Archaeology* xxxii (1928), 481–2, and G. C. Miles in *Antioch-on-the-Orontes*: Vol. IV, *Ceramics and Islamic coins* (Princeton 1948), 119–21.
- 229 *No. 6*. H. Longuet's explanation, in 'Notes de numismatique byzantine', *RN*<sup>5</sup> ii (1938), 20, is not quite correct.
- 229 *Nos 7 and 8*. These have Christ holding an open Gospel Book, an unusual feature which first appears on two post-reform types of Alexius I [1042, 1055] and thus dates them to after 1092.
- 229 *No. 9*. Bendall suggests that the Es may refer to St Eugenius, the patron saint of Trebizond.
- 229 *No. 10*. Bendall notes that this type was the basis of one struck by Salduk ibn Ali at Erzurum in the 1150s.



- 229 *No. 11.* Illustrated by Sabatier (S. Pl. LXVI.5) as Theodore II. Another in Longuet, 'Notes de numismatique byzantine', 21, no. 27.
- 229 *No. 12.* Illustrated by Sabatier (S. Pl. LXVI.6) as Theodore II.
- 229 *No. 13b.* Schlumberger Pl. II. 5 (as Antioch, the letters, which stand for *ALexios Basileus Romaion*, having been misread).
- 229 *No. 14.* Illustrated by Wroth (WV Pl. LXII.9) as 'Uncertain Trapezuntine', following S. Pl. LXX. 15 and p. 339. The place of origin seems assured, but the coin is appreciably later than the others (mid-twelfth century).
- 229 *Additional piece.* Longuet, 'Notes de numismatique byzantine', 20–1, no. 25.
- 230 *Gornoslav hoard.* K. Dzhambov, 'Le tresor de Gornoslav', *Arkheologiya* iii/4 (1961), 1–5; Hendy 343 and *passim*.
- 230 *Light trachea.* N. Kapamadjı and C. Morrisson, 'Trachéa d'électrum légers de Jean II et Manuel Ier Comnène', *BSFN* xxvii (1972), 163–6.
- 230 *Cypriote hoard.* Hendy 371–2 (Nicosia I), since published by P. J. Donald and P. D. Whitting, 'A hoard of trachea of John II and Manuel I from Cyprus', in R. A. G. Carson (ed.) *Mints, dies and currency. Essays in memory of Albert Baldwin* (London 1971), 75–84.
- 231 *Manuel I.* Besides Hendy and *BNC*, see particularly J. Balling, 'Byzantine double hoard from Lindos', *Nordisk Numismatisk Årsskrift* (1963), 13–41.
- 233 *Andronicus I.* C. Morrisson, 'Le nomisma trachy d'Andronic Ier Comnène (1183–1185)', *Bull. du Club français de la médaille* xlix (1975), 102–12.
- 235 *Tetarteron of Alexius IV.* S. Bendall, 'Coinage for the joint reign of Isaac II, restored, and Alexius IV (18 July 1203–5 February 1204 AD)', *N. Circ.* lxxxvii (1979), 382–3.
- 235 *Isaac of Cyprus.* D. M. Metcalf, 'A follis of Isaac Comnenus of Cyprus, 1184–91, from the di Cesnola collection', *SCMB* (1975), 261–2.
- 235 *Trachea of Mankaphas.* E. Pochitonov, 'Nejstarší bulharské ražby druhého carství', *Numismatické Listy* xxv (1970), 146–9. I am indebted to Hendy for photographs and information about the specimen from Aphrodisias – it is illustrated by kind permission of Kenan Erım – and that at Birmingham.
- 236 '*Neatly clipped trachea*'. Hendy 179–81, and the draft of his preface to *DOC* 4; D. M. Metcalf, 'Neatly-clipped trachea and the question of Byzantine monetary expedients in the late twelfth century', *N. Circ.* lxxxı (1973), 370–1; A. A. Gordus and D. M. Metcalf, 'Neutron activation analyses of Byzantine neatly-clipped trachea of the late twelfth century', *N. Circ.* lxxxii (1974), 55–6; D. M. Metcalf, 'Coinage and coin finds associated with a military presence in the medieval Balkans', in *Frappe et ateliers monétaires dans l'Antiquité et Moyen Age* (Belgrade 1976), 89–97; P. Grierson, 'The date and fineness of Byzantine "neatly-clipped" trachea', *N. Circ.* lxxxiii (1975), 58; D. M. Metcalf, 'The Istanbul hoard of 1964 and the date of the neatly-clipped trachea', *N. Circ.* lxxxiii (1975), 330–1. Dr Metcalf has informed me that chemical analysis of coins from the Istanbul hoard bear out the unexpected figures given by Professor Gordus' earlier analyses by neutron activation.

## 8 The Empire in exile, 1204–1261

- 239 *Chapter 8.* My account is almost entirely dependent on Hendy 191 ff., and his draft introduction to *DOC* 4. Important fresh material has been published in recent years by P. Protonotarios: 'Rare and unpublished coins of the Empire of Nicaea', *N. Circ.* lxxx

- (1972), 56–7; 'More rare and unpublished coins of the Empires of Nicaea and Thessalonica', *N. Circ.* lxxxii (1974), 52–5.
- 241 *Fineness*. Hendy 11–12, 247; T. Bertelè, 'Il titolo degli iperperi della zecca di Nicea', *Proceedings of the 13th International Congress of Byzantine Studies, Oxford 1966* (London 1967), 339–41.
- 241 *Alphonse of Poitiers*. E. Cartier in *RN* xii (1847), 121, 135–8.
- 241 *Hagiosoritissa*. See note to p. 220.
- 242 *Ducas*. D. I. Polemis, *The Doukai* (London 1968).
- 242 *Palm as insignia*. T. Bertelè, 'L'imperatore con una palma su una bulla e monete bizantine del sec. XIII', in P. Wirth (ed.) *Polychronicon: Festschrift Franz Dölger zum 75. Geburtstag* (Heidelberg 1966), 82–9.
- 242 *Christ Chalkites*. C. Mango, *The Brazen House: a study of the vestibule of the Imperial Palace of Constantinople* (Copenhagen 1959), 108 ff., esp. 132–8.
- 242 *Fleur-de-lis*. V. Laurent, 'L'emblème du lis dans la numismatique byzantine: son origine', in H. Ingholt (ed.) *Centennial Publication of the American Numismatic Society* (New York 1958), 417–27.
- 242 *Winged types*. T. Bertelè, *L'imperatore alato nella numismatica bizantina* (Rome 1951).
- 243 *Privy marks*. N. Papadopoli, *Le monete di Venezia* I (Venice 1893), 175, 391, and cf. p. 26 above.
- 244 *Empire of Nicaea*. A. Gardner, *The Lascarids of Nicaea* (London 1912; outdated over details); M. Angold, *A Byzantine government in exile. Government and society under the Lascarids of Nicaea, 1204–1261* (London 1975).
- 246 *Electrum. Class I*. Protonotarios in *N. Circ.* lxxxii (1974), 52, no. 1.  
*Classes II, III*. T. Bertelè, 'Monete degli imperatori di Nicea. I. Monete inedite d'argento di Teodoro I Lascaris (1204–1222)', *Numismatica* ii (1936), 91–3; A. R. Bellinger, 'A hoard of silver coins of the Empire of Nicaea', in H. Ingholt (ed.) *Centennial Publication of the American Numismatic Society* (New York 1958), 73–81. A specimen of Class II was found at Sardis (no. 971).  
*Class IIIb*. Added by Hendy in *DOC* 4.
- 247 *Torbali hoard*. A. R. Bellinger, 'Three more hoards of Byzantine copper coins', *MN* 11 (1964), 213–22, esp. 221–2, nos 254–447.
- 247 *Sardis finds*. H. W. Bell, *Sardis*: Vol. XI, *The Coins* (Leiden 1916), nos 973–84.
- 247 *Copper trachea. Type C*. Sardis specimen very poor: there is a better one published in a private collection at Athens.
- 247 *Type D*. Protonotarios in *N. Circ.* lxxxii (1974), 52, nos 2–3 (4 spec.).
- 247 *Type E*. Protonotarios in *N. Circ.* lxxxiv (1976), 46, no. 5.
- 248 *Hoards*. WV 213–15. The essentials of the hoard are known from two articles: G. Rollin, 'Monnoies d'or des empereurs de Nicée', *RN* vi (1841), 171–6, and H. P. Borrell, 'Unedited coins of the Lower Empire', *NC* iv (1841/2), 15–22. It is generally agreed that these hoards, each said to have consisted of about 1000 coins and one alleged to have been found near Brusa, the other near Smyrna, were one and the same.
- 248 *John II and John III*. D. M. Metcalf, 'John Vatatzes and John Comnenus. Questions of style and detail in Byzantine numismatics', *Greek, Roman and Byzantine Studies* iii (1960), 203–14. He subsequently abandoned almost all these attributions in the light of hoard evidence: see *Coinage in the Balkans* (note to p. 19), 94. See Hendy 246–54.
- 248 *Hyperpyra, mules and transitional coins*. P. Protonotarios, 'Transitional types to hyperpera of John III Vatatzes' first and second gold coinages', *N. Circ.* lxxxii (1974), 390–1.
- 249 *Silver trachea*  
*J*. Protonotarios in *N. Circ.* lxxxii (1974), 52, no. 6.  
*K*. *N. Circ.* lxxxiv (1976), 46, no. 1.  
*L*. Istanbul, Archaeological Museum.  
*M*. Bank Leu Auction (4 May 1976), lot 545.  
*N*. Protonotarios in *N. Circ.* lxxxii (1974), 52, no. 5.  
*O*. *ibid.*, 53, no. 7.

- 250 *Copper trachea*.  
*M.* Sardis, no. 988.  
*N.* Protonotarios in *N. Circ.* lxxx (1972), 56, no. 3.  
*O.* Hendy Pl. 51.6 (Birmingham, Barber Institute).  
*P.* Protonotarios in *N. Circ.* lxxx (1972), 56, no. 2.  
*Q.* *N. Circ.* lxxxii (1974), 53, no. 8 (Athens, Archaeological Museum).  
*R.* *ibid.*, no. 9.  
*S.* *N. Circ.* lxxxiv (1976), 46, no. 2a.  
*T.* Hendy Pl. 35.12 (as Theodore II).
- 252 *Copper trachy. Type D.* Protonotarios in *N. Circ.* lxxxii (1974), 53, no. 11.
- 252 *Misattributed coins.* P. D. Whitting and P. J. Donald, 'Two coins of John IV of Nicaea', *N. Circ.* lxxv (1967), 32.
- 254 *Rhodes.* G. Schlumberger, 'Numismatique de Rhodes avant la conquête de l'île par les Chevaliers de Saint-Jean', *Revue archéologique*<sup>2</sup> xxxi (1876), 233–44, summarized in Schlumberger 214–16.
- 255 *Epirus.* D. M. Nicol, *The despotate of Epirus* (Oxford 1957) (discusses the coins on pp. 203–11, but mainly those of Thessalonica, and now in part superseded); L. Stiernon, 'Les origines du despotat d'Épire', *REB* xvii (1959), 90–126, continued in *Actes du XIIe Congrès d'Études byzantines, Ochride 1961* II (Belgrade 1964), 197–202; Polemis, *op. cit.* (see note to p. 242), Schlumberger 358 ff.
- 257 *Billon trachea.* Schlumberger 373 (one his Pl. XIII.21, the other S. Pl. LIX.21), repeated doubtfully by Wroth (WV 226). The first coin is S. Bendall, *The billon trachea of Michael VIII Palaeologos 1258–1282* (London 1974), T. 14, the second Bertelè, *L'imperatore alato*, Pl. II. 12 ff.
- 257 *Electrum trachy.* Svoronos in *Journal international d'archéologie numismatique* xi (1908), 314, no. 411 (without illustration). Hendy notes the existence of another in a private collection.
- 257 *Theodore, electrum trachy.* Noted by Hendy in *DOC* 4.
- 257 *Manuel, Class B of Thessalonica.* So Hendy in *DOC* 4.
- 258 *Michael II, billon trachy, first type.* Corrected by Hendy in *DOC* 4.
- 258 *Second type.* Published by T. Bertelè, 'Una moneta dei despoti di Epiro', *Numismatica* xvii/xviii (1951/2), 17–18 (reproducing an article with the same title in *BZ* xlv (1951), 25–6, but correcting the attribution of the silver seal from Michael I to Michael II).
- 258 *Thessalonica.* Schlumberger 278–84 (Latin kingdom); Polemis and Nicol, as under Epirus (notes to pp. 242, 255).
- 259 *Copper trachy, Type C, with SS Constantine and Helena.* For the type, but without any firm attribution of the coins, T. Bertelè, 'Constantino il Grande e S. Elena su alcune monete bizantine', *Numismatica* xiv (1948), 91–106.
- 261 *Silver. Type B.* Two very fine specimens, from a hoard found near Nish, were published by Marić in *Starinar*<sup>2</sup> v/vi (1954/5), 351–2.  
*Type C.* Attributed by Wroth (WV 222, nos 3, 4) to Theodore II.
- 261 *Copper trachea.* Cut-down specimens of Types B, D and F from the Oustovo and Tri Voditsi hoards are illustrated by Hendy (Pl. 45.1–3).
- 261 *Copper trachy, Type C overstruck on Type F.* S. Bendall, 'An overstrike of Theodore Comnenus-Ducas of Thessalonica, AD 1224–1230', *N. Circ.* lxxxiv (1976), 416.
- 261 *Tetarteron with long inscriptions.* S. Bendall, 'A new tetarteron of Theodore Comnenus-Ducas', *N. Circ.* lxxix (1971), 10.
- 262 *Silver trachy. Type C.* S. Bendall, 'An unpublished silver trachy of Manuel Comnenus Dukas of Thessalonika, AD 1230–1237', *N. Circ.* lxxvii (1969), 331. Another specimen is published by Protonotarios in *N. Circ.* lxxxii (1974), 53, no. 12.  
*Type D.* Originally attributed to Manuel I, and an imaginary co-rulership with Andronicus, by K. M. Edwards, 'A remarkable coin of Manuel I Comnenus', in *Classical studies in honor of E. Capps* (Princeton 1936), 103–5. Another specimen

was published and correctly identified by H. Longuet, 'Deux monnaies de Manuel l'Ange Comnène Ducas, empereur de Thessalonique (1230–1262 [sic])', *RN*<sup>5</sup> vii (1943), 142–4.

*Type F.* Attribution doubtful. The inscription on the DO specimen is uncertain, though it seems to begin with M.

*Type G.* Longuet, 'Deux monnaies', 137–42, discusses the type of this coin, which he attributed to Slav influence. A minor variant of it also exists in copper.

- 262 *John Comnenus Ducas.* T. Bertelè, 'Monete di Giovanni Comneno Duca imperatore di Salonicco (1237–44)', *Numismatica* xvi (1950), 61–79, supersedes Laurent's much less adequate fourteen-page study of 1943. The winged types, and their possible models, are discussed in Bertelè, *L'imperatore alato*. New material is published by S. Bendall, 'Thessalonican coinage of the mid-thirteenth century in the light of a new hoard', *NC*<sup>7</sup> xviii (1978), 105–15.

- 263 *Series I. Type A.* The unique specimen (illustrated) shows only half the type, but the rest is evident from Series III, Type A.

*Type F.* Published by M. Caramessini-Oeconomides in *RN*<sup>6</sup> ix (1967), 261, no. 77, from a specimen found in the excavations at St Achilleus, in Little Prespa lake on the Greek frontier with Albania and Yugoslavia. The inscription is illegible, and the identification is Hendy's.

- 264 *Series III. Type J.* Obv. type from a specimen published by Protonotarios in *N. Circ.* lxxxii (1974), 54, no. 14. The DO one is a brockage.

*Type S.* In the BN.

*Type T.* S. Pl. LXII. 18 (as John V). Hendy notes specimens at Berlin and Istanbul, and in a private collection.

- 265 *Type with St Peter.* D. Lathoud and T. Bertelè, 'Les clefs de S. Pierre sur une monnaie de Jean III Doucas Vatatzes, empereur de Nicée (1222–1254)', *Unitas* i (1948), 189–96, the essentials of which are reproduced by

Bertelè in *Numismatica* xiv (1948), 88–90.

- 266 *Trachy with Michael II.* M. Hendy and S. Bendall, 'A billon trachy of John Ducas, Emperor, and John Comnenus-Ducas, Despot (?)', *RN*<sup>6</sup> xii (1970), 143–8; T. Gerasimov, 'Medni moneti na Ioan III Vatatzes s Epirskiya despot Mikhail II', *Izvestiya na Arkheologicheskiya Institut* xxxiv (1974), 319–22.

- 266 *Silver trachy. Class B.* Published by Protonotarios in *N. Circ.* lxxx (1972), 56, no. 1.

- 267 *Melting down of statues.* Nicetas Choniates, *De signis Constantinopolitanis*, ch. 5 (Bonn edn 1835), 859.

- 267 *Treaty of 1219.* 'Conventum est inter hoc, quod nec Imperium meum, neque tuus dispotatus habeat licentiam formare yperpyros, vel manuelatos, aut stamena equalis forme alterius partis': G. F. L. Tafel and G. M. Thomas, *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedigs II* (Vienna 1856), 207.

- 267 *Anonymous Folles attributed to Nicaea.* S. II. 235–7 (Pl. LVIII. 15–19; LIX. 1, 2); W. lxvii, 554.

- 268 *Objections to the Latin attribution.* T. Bertelè, *Moneta veneziana e moneta bizantina* (Florence 1973), Appendix II (89–104). For their attribution to the Bulgarians: Metcalf in his account of the Peter and Paul hoard (next note).

- 268 *Peter and Paul hoard.* D. M. Metcalf, 'The Peter and Paul hoard: Bulgarian and Latin imitative trachea in the time of Ivan Asen II', *NC*<sup>7</sup> xiii (1973), 144–72.

- 270 *Large module trachy. Type B.* See especially the contents of the Troad hoard in Bellinger, 'Three more hoards of Byzantine copper coins', 222–6.

*Type I.* The fabric of the only known specimen is peculiar, for it is so exactly circular as to resemble an amulet rather than a coin.

*Types K, L.* Since no thirteenth-century emperor was named Constantine, Bertelè originally attributed these to Constantine

Angelus of Neopatras (1296–1303), for whom no coins are known ('Monete bizantine inedite o rare', *Zeitschrift für Numismatik* xxxvi (1926), 35–6, nos 112–13). The coin attributed by Lord Grantley to Constantine of Neopatras ('Some later coins of the Crusaders', *NC*<sup>5</sup> iii (1923), 54) is really Bulgarian.

*Types U, V.* Peter and Paul hoard, 166 (nos 323–42), 164 (nos 193–205).

- 271 *Frankish coinage.* Schlumberger, 285 ff.; D. M. Metcalf, 'The currency of deniers tournois in Frankish Greece', *Annual of the British School at Athens* lv (1960), 38–59, esp. 45–9; 'Frankish petty currency from the Areopagus at Athens', *Hesperia* xxxiv (1965), 203–23; and 'The Berbati hoard, 1953: deniers tournois and sterlings from the Frankish Morea', *NC*<sup>7</sup> xiv (1974), 119–24.
- 272 *Sicilian ducales.* Spahr, nos 72, 94. Hendy points out (42–3) that the type is derived from a Thessalonican pre-reform type of Alexius I [1025]. The Byzantine element in Sicilian coinage, as in Sicilian art generally, was very strong under Roger II (cf. Spahr, nos 48–54, 76, 77, 99) and has occasionally been a source of confusion: no. 77 was ascribed to Andronicus IV by Goodacre (345, no. 1), and no. 53 was more recently attributed to Irene Ducaina as widow of Alexius I.
- 272 *Cypriote bezants.* Schlumberger 184 ff.
- 272 *Manfred.* Schlumberger 384–5, but the coin is normally concave, not flat.
- 272 *Serbian mines.* D. Kovacević, 'Les mines d'or et d'argent dans la Serbie et la Bosnie médiévales', *Annales: Économies, Sociétés, Civilisations* xv (1960), 248–58. Cf. also Metcalf, *Coinage in the Balkans* (see note to p. 19), 197 ff.
- 272 *Serbian silver grosh.* The standard work of S. Ljubić, *Opis jugoslavenskih novaca* (Zagreb 1878), attributed to Stephen's predecessor Vladislav I (1233–43) a substantial coinage now known to belong to Vladislav II (1321–4). The work of R. Marić, *Studije iz srpske numizmatike* (Belgrade 1956) is now essential.
- 272 *Stephen Radoslav's coins.* D. Gaj-Popović, 'Monnaie du roi Radoslav', in *Frappe et ateliers monétaires dans l'Antiquité et Moyen Âge* (Belgrade 1976), 121–32, describing all known specimens and discussing the earlier literature; M. Popović, 'La découverte d'un dépôt de monnaie du roi Stéphane Radoslav dans la forteresse de Ras', *ibid.*, 115–19.
- 274 *Bulgarian gold coin.* T. Gerasimov, 'Privata zlatna moneta na tsar Ivan Asen II', *Bull. de l'Institut archéologique bulgare* viii (1934), 361–8.
- 274 *Bulgarian copper coins.* N. A. Mouchmov, 'Dve neizdadani bulgarski moneti', *Bull. de la Société archéologique bulgare* iii (1913), 224–34, and his *Numismatique et sigillographie bulgares* (Sofia 1924), 69–71; Hendy 296–7.
- 274 *Trebizond.* A. Vasiliev, 'The foundation of the Empire of Trebizond', *Speculum* xi (1936), 3–37.
- 275 *Early coinage of Trebizond.* WV, relevant sections; O. Retowski, *Die Münzen des Komnenen von Trapezunt* (Moscow 1910), now reprinted (Brunswick 1974) with a two-page bibliographical introduction by W. Hahn. A new study by M. Kuršanskis, with a section on monetary terms and economy by A. A. M. Bryer, is in preparation. See also A. A. Gordus and D. M. Metcalf, 'Non-destructive chemical analysis of the Byzantine silver coinage of Trebizond', *Arkheion Pontou* xxxiii (1975/6), 28–35.
- 275 *Early trachea.* D. M. Metcalf and I. T. Roper, 'A hoard of copper trachea of Andronicus I of Trebizond (1222–1235)', *N. Circ.* lxxxiii (1975), 237–9; A. Vegler and A. Millas, 'Copper coins of Andronicus I Comnenus Gidon (1222–1235)', *N. Circ.* lxxxv (1977), 487–8; and S. Bendall, 'Andronicus I of Trebizond', *N. Circ.* lxxxviii (1980), 400–1.

## 9 The Palaeologid dynasty, 1261–1453

- 276 *Historical background*. D. M. Nicol, *The last centuries of Byzantium 1261–1453* (London 1972).
- 278 *Numismatic background*. T. Bertelè and C. Morrisson, *Numismatique byzantine* (Wetteren 1978), the most valuable and novel sections in which deal with the coinage of the fourteenth and fifteenth centuries; T. Bertelè, 'L'iperpero bizantino dal 1261 al 1453', *RIN* lix (1957), 70–89; S. Bendall and P. J. Donald, *The later Palaeologan coinage 1282–1453* (London 1979), with 'Amendments to "Later Palaeologan coinage"', *N. Circ.* lxxxvii (1979), 499–500, and 'Additions to "Later Palaeologan coinage"', *N. Circ.* lxxxviii (1980), 45–7. For the monetary system see also the work of Zakythinos referred to below, note to p. 279. Much of the detailed literature is concerned with the coinage of individual rulers or denominations, and is noted under the appropriate sections.
- 277 *Customs revenue*. Nicephorus Gregoras (Bonn edn 1829), II. 842.
- 278 *Association coinages*. T. Bertelè, 'Le co-empereur sur les monnaies des Paléologues', in Bertelè and Morrisson, op. cit., 137–53.
- 278 *Assarion*. Nicolas Rhabdas in P. Tannéry, *Oeuvres scientifiques* IV (Toulouse-Paris 1920), 158.
- 279 *Monetary system*. In addition to the studies of Bertelè: D. A. Zakythinos, *Crise monétaire et crise économique à Byzance du XIIIe au XVe siècle* (Athens 1948), reprinted in French as no. XI in his *Byzance: État – Société – Économie* (London 1973). Cf. also A. Manuel de Guadan, 'La devaluación de la moneda de oro en Byzancio y sus consecuencias económicas', *Numario Hispanico* xi (1967), 12–44, and the texts collected by P. Wirth, 'Das Ende der römisch-byzantinischen Goldwährung', *Jahrbuch für Numismatik und Geldgeschichte* xxv (1975), 113–22.
- 279 *English ambassador*. C. Desimoni, 'I conti dell'ambasciatura inglese al Chan di Persia nel 1292', *Atti della Società ligure di storia patria* xiii (1888), 617–21.
- 279 *Badoer*. U. Dorini and T. Bertelè, *Il Libro dei Conti di Giacomo Badoer, Constantinopoli 1436–1440* (Rome 1956).
- 279 *For some essential elucidations*. T. Bertelè, 'Il giro d'affari di Giacomo Badoer: precisazioni e deduzione', *Akten des XI. Internationalen Byzantinischen Kongresses 1958* (Munich 1960), 48–57.
- 279 *Exchange relations with Venice*. Bertelè, *Moneta veneziana* (see note to p. 268).
- 279 *Fineness of hyperpyron*. Pachymeres II. 494. Cf. Zakythinos, op. cit., 8–9, correcting older misunderstandings of the passage by Bratianu and others.
- 279 *Pegolotti*. Pegolotti, op. cit. (see note to p. 32), 40, 290.
- 279 *Fineness of 11 carats*. Pegolotti, op. cit., 40. Modern analyses of coins of the joint reign of Andronicus II and III give figures of between 414/1000 and 500/1000: see T. Gerasimov, 'Les hyperpères d'Andronic II et d'Andronic III et leur circulation en Bulgarie', *Byzantinobulgarica* i (1962), 217–18.
- 280 *Stavraton*. A. Cutler, 'The stavraton: evidence for an elusive coin type', *MN* 11 (1964), 237–44. On the treaty of 1337 see p. 315. Other fourteenth-century references are in connection with the wedding of Bayazid I (1381/2) and the coronation of Manuel II in 1392.
- 281 *Stars*. T. Gerasimov, 'Monnaies des Paléologues avec des représentations d'étoiles', *Byzantinobulgarica* iii (1970), 103–16.
- 282 *Thessalonican hoards*. H. Longuet, 'Une trouvaille des monnaies des Paléologues', *RBN* cvi (1960), 243–66; D. Nicol and S. Bendall, 'Anna of Savoy in Thessalonica: the numismatic evidence', *RN*<sup>6</sup> xix (1977), 87–102.
- 283 *Indictional dates*. T. Bertelè, 'La date par indiction sur quelques monnaies des Paléo-

- logues', in Bertelè and Morrisson, op. cit., 123–36.
- 283 *Cross with four Bs.* A. Soloviev, 'Les emblèmes héraldiques de Byzance et les slaves', *Seminarium Kondakovianum* vii (1935), 119–64, esp. 155–62; V. Laurent, 'Le briquet, emblème monétaire sous les Paléologues', *CNA* xvii (1943), 134–48.
- 283 *Double-headed eagle.* G. Gerola, 'L'aquila bizantina e l'aquila imperiale a due teste', *Felix Ravenna*<sup>2</sup> iv (1934), 7–36.
- 285 *Michael IX crowned in 1294.* The commonly accepted date is incorrect: see J. Verpeaux, 'Notes chronologiques sur les Livres II et III du *De Andronico Palaeologo* de Georges Pachymère', *REB* xvii (1959), 170–3.
- 286 *Problems of Andronicus II's coins.* See notes to pp. 291, 296–7.
- 287 *Coins of Andronicus III with Anna or John.* The most recent study, by P. Protonotarios, 'Le monnayage d'or et d'argent d'Andronic III avec Jean V et Anne de Savoie', *RN*<sup>6</sup> xix (1977), 77–86, attributing the coins to the end of Andronicus III's reign, does not convince me.
- 287 *John V.* A. Vegler and A. Millas, 'Gold and silver coins of the time of John V (1341–1391)', *N. Circ.* lxxviii (1970), 486–8; lxxix (1971), 2–5.
- 287 *Anna of Savoy.* Nicephorus Gregoras xiv. 10; xv. 1, 2; xvi. 2. C. Diehl, *Figures byzantines. 2e série* (Paris 1908), 245–70. See especially the monograph of Bertelè cited in note to p. 299, and Nicol and Bendall, 'Anna of Savoy in Thessalonica'.
- 288 *John VI.* H. Longuet, 'Le monnayage de Jean VI Cantacuzène', *RN*<sup>4</sup> xxxvi (1933), 135–48; T. Bertelè, 'Monete dell'imperatore Giovanni VI Cantacuzeno', *Mélanges G. Ostrogorsky* I (Belgrade 1963), 43–59.
- 290 *Constantine XI's coinage.* J. R. Jones, 'Literary evidence for the coinage of Constantine XI', *N. Circ.* lxxv (1967), 97; S. Bendall, 'A coin of Constantine XI', *N. Circ.* lxxxii (1974), 188–9.
- 291 *Hyperpyron design.* Pachymeres II. 494; Pegolotti, op. cit. (note to p. 32), 290.
- 291 *Subventions to allies.* Discussed by V. Laurent, 'Les Vêpres siciliennes et la dévaluation de l'hyperpère', *Χαριστήριον εις Ἀναστάσιον Κ. Ὁρλανδον*, I (Athens 1964), 36–45.
- 291 *Hyperpyra of Andronicus II and III.* Basic studies: A. Vegler and G. Zacos, 'The coins of Andronikos II with the inscription "Emperors of the Romans"', *N. Circ.* lxxix (1961), 134–6; A. Vegler and A. Millas, 'Gold coins for Andronicus III (1328–1341)', *N. Circ.* lxxxii (1973), 467–9, and lxxxii (1974), 4–7, 50–1; P. Protonotarios, 'Is a re-attribution of the hyperpyron of the *Proskynesis* type justified?', *N. Circ.* lxxxii (1974), 283–5, and 'The hyperpyra of Andronikos II and Michael IX (1295–1320) with transposed effigies and names of the emperors or with transposed legends only', *Nomismatika Khronika* iv (1976), 42–6; and Gerasimov, 'Les hyperpères d'Andronic II et d'Andronic III', 214–36 (but see the observations of D. M. Metcalf in *HBN* xviii–xix (1964–5), 320–1). S. Avdev argues unconvincingly that coins with the names of the two Andronici are imitations struck by Italian merchants: 'Za imitatsionnaya proizkhod na perperite na Andronik II i Andronik III', *Numizmatika* xii/1 (1978), 18–27.
- 293 *Hyperpyra of Andronicus III, Anna and John V.* T. Gerasimov, 'Les hyperpères d'Anne de Savoie et de Jean V Paléologue', *Byzantinobulgarica* ii (1966), 329–35, and Protonotarios, 'Le monnayage d'or et d'argent'.
- 294 *Hyperpyron of John V and John VI.* Vegler and Millas, 'Gold and silver coins'.
- 294 *'Florin' of John V.* A. Blanchet, 'Les dernières monnaies d'or des empereurs de Byzance', *RN*<sup>4</sup> xiv (1910), 78–90. The question of its authenticity has been discussed by all subsequent writers.
- 294 *Four specimens.* London (W. 635, no. 1), Paris, Turin, Naples.
- 295 *Class E.* See S. Bendall, 'A numismatic representation of the Hetoimasia', *NC*<sup>7</sup> xvi (1976), 231–4. On the theme: T. von Bogay, 'Thron (Hetoimasia)', in *Lexikon der christ-*

- lichen Ikonographie* IV (Freiburg-i.-B. 1972), 305–14.
- 295 *Silver trachy of Andronicus II*. The BM specimen so described (W. Pl. LXXV. 5) is in fact of copper and a variant of *LPC* 76–7<sup>16</sup>.
- 296 *Silver coins of Andronicus II*. V. Laurent, 'Le basilicon, nouveau nom de monnaie sous Andronic II Paléologue', *BZ* xlv (1952), 50–8; P. Protonotarios, 'The silver coinage of the joint reign of Andronicus II and Michael IX (1295–1320)', *N. Circ.* lxxx (1972), 452–3; Whitting, 'Miliaresia of Andronicus II and Michael IX' (see note to p. 28), 270–4, 324–6; Vegler and Zacos, 'The coins of Andronikos II', 134–6, 159–62, and 'Silver coins of Andronikos II and Andronikos III', *N. Circ.* lxx (1962), 76–80; S. Bendall, 'Further Palaeologan overstrikes', *N. Circ.* lxxxiv (1976), 144.
- 297 *Anonymous ('religious') basilica*. T. Bertelè, 'New Byzantine coin', *N. Circ.* lvi (1948), 161–3; Vegler and Zacos, 'Silver coins of Andronikos II and Andronikos III'; S. Bendall, 'Notes on some early fourteenth century Byzantine silver coins', *N. Circ.* lxxxvi (1978), 123.
- 298 *Fineness of half basilica*. Information provided by Professor A. Gordus (two specimens at DO).
- 298 *Fineness of Type A*. Bendall, *LPC* 30, gives 36 per cent to 39 per cent. Streak analyses by Gordus give much lower figures (c. 20 per cent).
- 298 *Rhabdas*. Tannéry, op. cit., 146.
- 299 *Two hoards*. T. Bertelè, *Monete e sigilli di Anna di Savoia imperatrice di Bisanzio* (Rome 1937); S. Bendall, 'A hoard of silver basilika of Andronicus III and John V', *Coin Hoards* iii (1977), 92–6. See also Vegler and Millas, 'Gold and silver coins'. Brunetti's estimates of the volume of the coinage are unsatisfactory (see note to p. 19).
- 300 *John V and John VI*. T. Gerasimov, 'Deux monnaies d'argent de Jean V Paléologue', *Bull. de l'Institut archéologique* xxviii (1965), 259–61; Vegler and Millas, 'Gold and silver coins' and 'The silver coinage of John VI, Cantacuzenus (1353–1354)', *N. Circ.* lxxx (1972), 310–11.
- 301 *Hoard evidence*. The only important published hoards are from Arta (H. Mattingly, 'A find of thirteenth-century coins at Arta in Epirus' *NC*<sup>5</sup> iii (1923), 31–46) and from near Bergama in Asia Minor: see H. L. Weller, 'Eighteen Byzantine scyphate coins of the late 1200s', *NC*<sup>7</sup> ix (1969), 235–46. A few isolated finds from Sardis, Troy, Ephesus and Lake Prespa are helpful.
- 313 *Politikon coinage*. V. Laurent, 'To Politikon. Monnaie divisionnaire de l'époque des Paléologues', *CNA* (1940), 119–20; T. Gerasimov, 'Srebrni moneti na Andronik III Peleolog s nadpis POΛITIKON', *Bull. de l'Institut archéologique* xxviii (1965), 257–9.
- 314 *Type G*. Bendall's illustration shows two pellets, an R, and an E in the quarters of the cross. This is the apparent reading of the illustration in the Cahn sale catalogue, but I prefer to follow the more likely description and illustration by F. von Pfaffenhoffen, who published the coin when it was in the Fürstenberg collection and had actually handled it.
- 315 *Istāvrāt*. D. Theodorides, 'Aus dem griechischen Lehngut im Osmanischen (I)', *Turcica* vii (1975), 36–8.
- 315 *Andronicus IV or John V?* Discussed notably by Bertelè, 'L'iperpero bizantino', 78–9, 85–9, and by Whitting in *NC*<sup>6</sup> xvii (1957), Proceedings, 11.
- 315 *Treaty of 1337*. I know the text through the kindness of Mrs A. N. Oikonomides (E. A. Zachariadou), who lists it in her article, 'Sept traités inédits entre Venise et les émirats d'Aydin et de Menteşe (1331–1407)', *Studi preottomani e ottomani. Atti del Convegno di Napoli, 24–26 sett. 1974* (Naples 1976), 229–40.
- 316 *Half stavrata with St Demetrius*. T. Gerasimov, 'Les monnaies de Jean VII Paléologue, 1400–1408', *Byzantinoslavica* xvii (1956), 114–19; T. Bertelè, 'Una curiosa moneta di Giovanni V Paleologo', *Studi Veneziani* xii (1970), 219–29.



- 317 *Stavrata of Manuel II, John VII and John VIII*. My attributions depart somewhat from those in Whitting, 'A late Palaeologan hoard' (see note to p. 28), 156–7, and S. Bendall, 'A hoard of silver coins of John VIII, 1423–1448', *N.Circ.* lxxxvi (1978), 14–15, and 'A hoard of fifteenth century silver quarter-hyperpyra', *N.Circ.* lxxxvii (1979), 441.
- 317 *Tornesi*. Bertelè, 'Constantino il Grande' (see note to p. 259), 95–8, and Gerasimov, 'Les monnaies de Jean VII Paléologue'.

# GLOSSARY

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This does not include the names given to particular coins, as distinct from those of denominations.

**ACCESSORY SYMBOL** A minor mark or device in a type or inscription, normally functional in character (e.g. identifying a mint or issue).

**AKAKIA** (ἡ ἀκακία) or **ANEXIKAKIA** (ἡ ἀνεξικακία). A cylindrical object with decorated knobs at the ends which was one of the imperial insignia from the late seventh century onwards and which the emperors are often shown holding on the coins. It contained a small quantity of dust, as a remainder to the emperors that they were mortal, and took the place of the consular mappa (q. v.), though its form was in part derived from that of a scroll (q.v.) of office.

**ANONYMOUS FOLLES** Byzantine copper coins struck between 970 and 1092 not bearing the names of individual emperors. Called also *Anonymous Bronze* or, from their main type, *Rex Regnantium folles*.

**ARGYRION** (τὸ ἀργύριον) Lit. a silver coin, but used in the generic sense of money, like Fr. *argent*.

**AS** (Lat.) Under the early Roman Empire, a copper coin weighing c. 11 g which was theoretically the basic unit of the monetary system.

**ASPER** (Gr. τὸ ἄσπερον) A term meaning originally 'rough' and subsequently 'fresh', 'clean', 'white', so that in the late Byzantine period it came to be applied to silver coins, usually small

ones, as in the Empire itself, but sometimes large ones, as at Trebizond. Cf. the western use of *blanc, witten, weisspfennig*.

**AUGUSTUS, AVGUSTA** (ὁ αὐγουστος, ἡ αὐγουστα) The traditional imperial title of the emperor or empress. See also **AUTOCRATOR**, **BASILEUS**, **CAESAR**, **DESPOT**.

**AUREUS** Lit. 'gold', and, with 'denarius' or 'solidus' understood, applied to the standard gold coin of the Roman Empire. Conventionally used by numismatists for a coin struck 60 to the pound in the late Roman and early Byzantine periods; introduced by Diocletian, it survived for occasional ceremonial issues into the sixth century.

**AUTOKRATOR** (ὁ αὐτοκράτωρ) Imperial title, employed especially in the late Byzantine period.

**BASILEUS** (ὁ βασιλεύς), **BASILISSA** (ἡ βασίλισσα) The classical Greek words for 'king' and 'queen'. Used in Greek literary sources for the emperor and the empress throughout the Byzantine period, and frequently as official titles on coins from the eighth century onwards.

**BASILICON** (τὸ βασιλικόν) A small silver coin introduced by Andronicus II on the model of the Venetian silver ducat (q.v.) and called, by

- analogy with the latter, an 'imperial'.
- BEZANT** The name given in western Europe to the Byzantine solidus.
- BILLON** (abbrev. **B**) The term used in western mints from the thirteenth century onwards for a silver-copper alloy containing less than 50 per cent silver. The equivalent Byzantine term is unknown. Very low-grade billon is known from its colour as 'black billon'.
- BLACHERNITISSA** (ἡ Βλαχερνίτισσα) An icon of the Virgin *orans* in the Church of the Virgin at Blachernae, in the north-western part of Constantinople, which was regarded as one of the *palladia* of the city.
- BRASS** An alloy of copper containing a small percentage of zinc.
- BRONZE** An alloy of copper containing a small percentage of tin. Byzantine copper coins have traditionally been described as bronze, though they are in fact of virtually pure metal.
- CAESAR** (Gr. ὁ Καῖσαρ) In Byzantine times, the title accorded to a junior emperor or, from the eleventh century onwards, to imperial relatives or high court officials.
- CAMELAUKION** (τὸ καμελαύκιον) The cap-like crown of a Caesar, half-spherical in shape so that it covered the head. It was without pendilia (q.v.).
- CARAT** (τὸ κεράτιον, Lat. *siliqua*) A measure of weight in the Mediterranean world based on the carob seed (*Ceratonia siliqua*) and weighing 1/1728th of the Roman pound (q.v.) or 0.189 g. Since the solidus (q.v.) weighed 24 carats, the secondary meaning of carat, which remains in common use today, is 1/24th as a measure for the fineness of gold.
- CHLAMYS** (ἡ χλαμύς) The imperial purple mantle, fastened by a fibula (q.v.) at the right shoulder and decorated with a tablion (q.v.). See also **PALUDAMENTUM**.
- CHRIST EMMANUEL** A term used by art historians for representations of the Infant Jesus.
- CHRIST PANTOCRATOR** (lit. 'all-ruler') The term applied to a particular bust of Christ, showing him clasping a Gospel Book and raising his right hand in benediction.
- CHRISTOGRAM** Monogram of **IXP**, for Ἰησοῦς Χριστός, usually in the form **✠** but sometimes **✡** (see p. 36).
- CLASS** A group of coins having the same basic design or believed to form part of a single issue (q.v.).
- COLOBION** (τὸ κολόβιον) A short tunic or undergarment, e.g. that shown on representations of Christ.
- CONSTANTINOPOLIS** The personification of the imperial capital, often used as a coin type during the fourth and fifth centuries and even into the sixth. It takes the form of a seated, helmeted female figure like that of Roma, but distinguished from her elder counterpart by having her right foot on the prow of a vessel. On early representations she sometimes wears a mural crown instead of a helmet.
- CONSUL OR HYPATOS** (Gr. ὁ ὕπατος) One of the joint holders, annually appointed, of what was traditionally the highest office in the Roman state. Under the Empire the consulship was purely honorary in character, and was assumed by the emperor himself from time to time. After 539 consuls ceased to be annually appointed and the office was assumed by each emperor in the year following his accession. By the end of the seventh century it had fallen completely into desuetude, but the term ὕπατεία continued to designate distributions of largesse like those of the former consular processions.
- COUNTERMARK** A small letter, monogram, or other device punched on the face of a coin, usually with the object of changing its value.
- CROSS, PATRIARCHAL** A cross with two pairs of cross-arms, one above the other.
- CROSS POTENT** A cross with a bar at the end of each arm.
- DECANUMMIUM** Copper coin worth 10 nummi (q.v.).
- DENARIUS** Originally a silver coin of the Roman Republic worth 10 asses, but in the late imperial period used (1) in the general sense of 'coin', (2) as a notional unit of value, often 1/6000th of the solidus, or (3) as a synonym of the nummus (q.v.). From the seventh century

onwards it is the term regularly applied to the small silver coin (penny) in normal circulation in the West.

**DESPOT** (ὁ δεσπότης), **DESPOINA** (ἡ δέσποινα) 'Master', 'mistress', the Greek equivalents of *dominus* and *domina*, officially used as imperial titles from the eighth century onwards.

**DIADEM** A Hellenistic symbol of majesty, consisting of a band adorned with pearls or precious stones which was worn round the head and tied behind. Adopted by Roman emperors in the fourth century it was continued into the early Byzantine period, but was later replaced by a more solid crown.

**DIE** The stamp used in coining.

**DIE AXIS** The relation between the position of the reverse type of a coin and that of the obverse. Sometimes important in mint identification, since individual mints might favour particular arrangements, e.g. at Carthage (see p. 42).

**DINAR** (from Lat. *denarius aureus*) The standard Islamic gold coin, weighing 4.25 g.

**DIRHEM** (from Gr. *drachma*) The standard Islamic silver coin, initially weighing c. 3.0 g.

**DIVITISSION** (τὸ διβιτήσιον) A form of long-sleeved and ankle-length garment worn beneath the chlamys (q.v.), loros (q.v.), or sagium (q.v.).

**DUCAT** A term applied to two types of coin of the duchy (*ducatus*) of Venice, whence the name. In the thirteenth and early fourteenth centuries it implies the silver grosso (2.2 g), a coin first struck in 1201 and imitated a century later at Constantinople under the name of basilicon (q.v.). Subsequently, and today normally, it means the gold ducat (*ducatus aureus*), created in 1284 and weighing 3.59 g.

**DUCELLO** The name applied in Italian commercial documents to the one-eighth silver stavraton (q.v.) which carried on from the small silver 'ducats' (i.e. basilica) of the mid-fourteenth century.

**DUPONDIUS** (Lat.) A brass coin of the early Roman Empire, worth 2 asses (q.v.).

**ELECTRUM** A term originally referring to a natural alloy of gold and silver found in Asia

Minor and used for the earliest coinage. Now applied to any alloy of gold in which the proportion of silver or copper is large enough to affect the colour.

**EMISSION** see **ISSUE**.

**EXAGIUM** (Gr. τὸ ἐξάγιον) or **SAGGIO** Lit. a weight, and specifically one of 4.55 g used for verifying the correct weight of the solidus. As *saggio* (It.) it is a term commonly used in western commercial documents relating to the eastern Mediterranean and Black Sea areas in the later Middle Ages.

**EXERGUE** The lower segment of a coin design, marked off by a horizontal line (called exergual line) and often containing a mint-mark.

**FIBULA** (τὸ φιβῶν) The brooch fastening a cloak at the wearer's right shoulder. The fibula with three pendants was an important element in the imperial costume.

**FIELD** The central space of a coin, more especially that left blank to the right and left of the main design.

**FOLLIS** (Gr. ὁ φύλλισ) A Latin word meaning originally a purse but used in the Byzantine period for the largest denomination of copper coin, initially worth 40 nummi (q.v.).

**GLOBUS** A sphere representing the world which Roman emperors are sometimes depicted holding as a symbol of sovereignty. From the fifth century onwards it is commonly surmounted by a cross (*globus cruciger*).

**GRAMMA** (τὸ γράμμα) The Greek term for a scruple (q.v.), 1/24th of the Roman ounce and so 1.137 g. Divided into 6 carats (q.v.). See also **HEXAGRAM**.

**GROS** (Fr.) or **GROSSO** (It.) A generic term for the type of 'large' (*grossus*, whence the name) silver coin which began to be struck in western Europe in the thirteenth century and became familiar in the Aegean area.

**HAGIOSORITISSA** (ἡ Ἁγιοσωρίτισσα) An icon of the Virgin standing half-right with hands raised in prayer.

**HEXAGRAM** (ἡ ἐξάγραμμα) A silver coin of the seventh century weighing 6.82 g, i.e. 6 gram-

- mata (q.v.), and probably reckoned 12 to the solidus. Introduced by Heraclius in 615.
- HISTAMENON** (τὸ νόμισμα ἱστάμενον) A term meaning literally 'standard' and applied initially to the gold nomisma (q.v.) of full weight in contrast to the substandard tetarteron (q.v.) introduced by Nicephorus II. Since the histamena of the mid-eleventh century were concave the term passed, in the shortened form *stamenon*, to the Byzantine billon and copper concave coins of the twelfth and thirteenth centuries. In this context it was principally used by the Latins. See also **TRACHY**.
- HODEGETRIA** (ἡ Ὁδηγήτρια) An icon of the Virgin standing, holding the Infant Jesus, which was believed to have been painted by St Luke.
- HYBRID** see **MULE**
- HYPATOS** see **CONSUL**
- HYPERPYRON** (τὸ νόμισμα ὑπέρπυρον) or **PERPERUM** (Lat.) A term meaning 'highly refined' and applied to the gold coin of standard weight but only 20½ carats fine introduced by Alexius I in 1092. By extension, a money of account based on this coin. After the gold hyperpyron, by then much debased, ceased to be struck in the mid-fourteenth century, the term was transferred to the large silver coin that replaced it, though this had only half its value. The shortened forms *perperum* (Lat.) or *perpero* (It.) are western.
- ICONOCLASM** A religious movement that involved the destruction of religious images and was official government policy over the years 726–87 and 815–43.
- IMMOBILIZATION** The retention of a coin design or inscription after its details (e.g. name of ruler) have ceased to be appropriate.
- INDICTION** A fifteen-year cycle used for dating purposes from the early fourth century onwards.
- INSCRIPTION OR LEGEND** The lettering or wording on a coin.
- ISSUE OR EMISSION** Coins presumed to have been issued in accordance with the terms of a specific mint instruction. See also **CLASS**.
- LABARUM** (Gr. τὸ λάβαρον) Originally a standard bearing a Christogram (q.v.) that was introduced by Constantine the Great. By extension, various types of standard or sceptre.
- LEGEND** see **INSCRIPTION**
- LIGHT-WEIGHT SOLIDI** Solidi of between 20 and 23 carats (instead of 24) occasionally struck from the mid-sixth to the late seventh century (Justinian I–Justinian II) and usually clearly marked as such (e.g. by OBXX on ones of 20 carats).
- LITRA** see **POUND**
- LOROS** (ὁ λῶρος) The elaborately decorated consular robe (Lat. *trabea*), which in the Byzantine period had come to have the form of a long jewelled scarf wound round the body, so that one end hung down in front and the other hung over the wearer's left arm (see p. 30). In the late ninth century the scarf began to be replaced by a simplified loros which was put on over the head (see p. 31) and has by some scholars been identified with the *loros clapotus* of late medieval texts.
- LOROS WAIST** The term devised by Hendy for the elaborately decorated part of the later loros (q.v.) where it passes in front of the body.
- MANIAKION** (τὸ μανιάκιον) A term used for the gold torque, worn round the neck, which formed a common military ornament. Sometimes mistakenly applied to the elaborate collar-piece of late Byzantine imperial costume.
- MANUELATUS** (τὸ νόμισμα μαυνηλάτον) A term used in the late twelfth and early thirteenth centuries for the one-third hyperpyron, a denomination last struck in any quantity under Manuel I (1143–80).
- MAPHORION** (τὸ μαφόριον) The veil worn by the Virgin.
- MAPPA** A roll of cloth which was thrown by the consul into the arena to start the games, so that it became one of the most familiar of consular insignia. Replaced in the seventh century by the *akakia* (q.v.).
- MEDALLION** A term applied by numismatists to unusual denominations or types of coin not forming part of the normal coinage.

- MICHAELATON** (τὸ νόμισμα μιχαηλᾶτον) In the narrow sense, a nomisma of an emperor named Michael, more especially one of Michael VII (1071–8), but by extension applied to other nomismata of the second half of the eleventh century.
- MILIARENSIS** or **MILIARENSE** A silver coin of the later Roman Empire, the name perhaps due to 1000 silver coins having been reckoned to the pound of gold sometime in the third or fourth century.
- MILIARESION** (τὸ μιλιάρησιον, from Lat. *miliarensis*) The name of the basic silver coin, reckoned 12 to the solidus, from the hexagram (q.v.) onwards, though numismatists generally limit it to the coins of thin, broad fabric introduced by Leo III and characteristic of the eighth/eleventh centuries. As a coin this ceased to be struck in the eleventh century, surviving only as a money of account, one-twelfth of the nomisma. Western documents from the twelfth century onwards apply the term *millarès* to various types of Muslim silver coin.
- MINT** A place where money is coined.
- MINT-MARK** Letters or symbols placed on a coin to indicate where it was struck. On Byzantine coins they are usually a shortened version of the mint name.
- MODULE** The diameter of a coin after striking.
- MULE** or **HYBRID** A coin produced from two dies not intended to have been used together and representing, for example, successive issues.
- ΝΙΚΟΡΟΙΟΣ** (ἡ Νικοποιός, lit. 'Maker of Victory') Epithet of an icon showing the Virgin holding a medallion of Christ which was preserved in a chapel of the Great Palace at Constantinople.
- NOMISMA** (τὸ νόμισμα) 'Coin', more especially the gold solidus (q.v.). In the late tenth century this began to split into two separate denominations, histamenon (q.v.) and tetarteron (q.v.). From 1092 onwards the coin is generally termed a hyperpyron (q.v.).
- NUMMUS** (Gr. τὸ νοῦμμιόν) A Latin term meaning originally 'coin', but normally applied in the early Byzantine period to the smallest copper coin, 1/40th of the follis (q.v.), which served as the base of the accounting system. As a unit of reckoning, 1/6000th of the nomisma (q.v.).
- OBRYZUM** (Gr. ὀβρυζον) The technical term in Latin and Greek for pure gold.
- OBVERSE** The side of the coin which bears the more important device, usually the head of a sovereign or, on Byzantine coins, a representation of Christ. See pp. 27–8. Because of the ambiguities that sometimes exist, many numismatists prefer to use it of the side of the coin struck by the lower (anvil) die.
- OFFICINA** A subdivision of a late Roman or Byzantine mint.
- ORANS** (lit. 'praying') An epithet applied to representations of the Virgin with her hands raised in prayer.
- OUNCE** (Lat. *uncia*, Gr. ἡ οὐγκία) One-twelfth of the Roman pound, i.e. 27.29 g. Divided into 24 scruples (q.v.) and 144 carats (q.v.).
- OVERSTRIKE** A coin for which the blank was an older coin, with traces of the earlier impression still visible.
- PALUDAMENTUM** (Lat.) A long military cloak, esp. that worn for ceremonial purposes by a general. Distinguished from a chlamys (q.v.) by the absence of a tablion (q.v.).
- PATTERN** A proposed coin design which may or may not be approved.
- PENDILIA** or **PREPENDULIA** (πρεπενδούλια) The pendants hanging down at each side of the imperial crown and distinguishing it from the crowns worn by caesars.
- PENTANUMMIUM** Bronze or copper coin worth 5 nummi (q.v.).
- PERPERUM** see **HYPERPYRON**.
- POLITIKON** (τὸ πολιτικόν) A small billon coin of the Palaeologid period, so-called from its inscription.
- POTIN** A term used for any mixed alloy of base metals, especially of tin, lead and zinc.
- POUND** (Lat. *libra*, Gr. λίτρα) Byzantium inherited the Roman pound, conventionally estimated at 327.45 g but possibly a little lighter. It

- was divided into 12 ounces (q.v.), each of 24 scruples (q.v.).
- PRIVY MARK** Letter or symbol placed on a coin as a mark of mint identification or control, without its meaning being obvious to the public.
- PUSULATUM** (Lat.) The Latin technical term for refined silver.
- REGNAL YEAR** A date reckoned from the precise day of each emperor's coronation. Where a ruler was associated on the throne by his predecessor this date precedes, possibly by several years, the beginning of his effective 'reign'.
- REVERSE** The opposite face of a coin to the obverse (q.v.).
- REX REGNANTIUM FOLLES** see **ANONYMOUS FOLLES**
- SACCOS** (ὁ σάκκος) A tight-fitting undergarment worn by the emperor and other high officials.
- SAGGIO** see **EXAGIUM**
- SAGIUM** (Gr. τὸ σαγίον, from Lat. *sagum*) A military cloak less voluminous than the paludamentum (q.v.).
- SCIPIO** (Lat.) The eagle-topped ivory sceptre which was one of the consular insignia.
- SCROLL** (Lat. *volumen*) A parchment roll which can have various implications. When carried by an official, it is a legal document or patent of office; when by a representation of Christ, it signifies the Gospel.
- SCRUPLE** (Lat. *scripulum*) 1/24th of an ounce. See **GRAMMA**.
- SCYPHATE** A term often improperly applied to Byzantine coins of concave fabric, since nineteenth-century scholars erroneously supposed that the word *scyphatus*, found in Italian documents of the eleventh and twelfth centuries, had this meaning. See p. 9.
- SEGNO** (It.) A mark identifying the person (moneyer or magistrate) responsible for a particular coin issue and often taking the form of his initial(s).
- SEMISSIS** (τὸ σημίσιον) or **SEMIS** A half solidus, a gold coin weighing 2.25 g.
- SENZATON** (τὸ σένζατον, from σένζος, Lat. *sessus*, 'throne') The name applied in the late ninth and tenth centuries to nomismata having as obverse type an enthroned Christ.
- SESTER TIUS** (Lat.) The largest denomination of AE struck under the early Roman Empire, worth 4 asses (q.v.). It was made of brass and weighed c. 28 g, with a diameter of c. 35 mm.
- SILIQUEA** The Latin term for carat (q.v.). By extension, a money of account in the later Empire worth 1/24th of the solidus, since this weighed 24 siliquae or carats. The term is customarily applied by numismatists to the commonest silver denomination of the late Empire on the assumption that its value was a siliqua.
- SOLIDUS** or **NOMISMA** (q.v.) The standard Byzantine gold coin, introduced by Constantine the Great and struck 72 to the Roman pound (6 to the ounce), thus weighing 24 carats or 4.55 g. Although both the Latin and Greek terms were in use concurrently from the beginning, numismatists tend to use solidus when writing of the fourth to the tenth centuries, and nomisma (q.v.) thereafter.
- SOUPPEDION** (τὸ σουππῆδιον) A low footstool or cushion on which Christ or the emperor sometimes stands.
- STAMENON** see **HISTAMENON**
- STAVRATON** (from Gr. σταυρός, 'cross') A name applied in the mid-eleventh century to nomismata showing the emperor holding a cruciform sceptre, and in the late fourteenth and early fifteenth centuries to silver hyperpyra, the inscriptions on which commenced with a cross.
- STEMMA** (τὸ στέμμα) Orig. a garland or wreath, but in Byzantine usage a crown.
- TABLION** (τὸ ταβλίον) An elaborately decorated rectangle of cloth which bordered the chlamys at the level of the chest and served much the same purpose as the modern lapel.
- TARI** A term used in south Italy and Sicily for the Muslim quarter dinar, the chief gold coin struck by the Fatimids and their Norman and Hohenstaufen successors in Sicily.
- TETARTERON** (τὸ νόμισμα τεταρτηρόν) A lightweight nomisma introduced by Nicephorus II and struck for a little over a century (c. 965–

1092). Its name derived from the fact that it was initially a quarter tremissis (2 carats) lighter than the regular nomisma (q.v.), though other weights were also employed (see pp. 196–7). After 1092 the name was transferred to a small copper coin which in its small module and thick fabric resembled the gold tetartera of the mid-eleventh century. Latin sources describe these coins as *tarterones*.

**THORAKION** (τὸ θωράκιον) An article of clothing, sometimes wrongly identified with the kite-shaped end of the loros shown on coins of empresses in the eleventh century. See p. 194.

**TORNESE OR TORNESELLO** (Fr. *tournois*) Initially the denier of base silver struck by the abbots of St Martin of Tours. Subsequently the coins of the same type struck by the kings of France and by several Frankish barons in Greece after the Fourth Crusade. By extension, various denominations of low-grade billon struck in Venice, in the Aegean area, and in Constantinople itself.

**TRACHY** (τὸ νόμισμα τραχύ) The Greek term used for the concave coins struck between the eleventh and fourteenth centuries, more especially those of electrum, billon or copper. The word meant basically 'rough' or, as used in this context, 'not flat', i.e. concave. See also **SCYPHATE**.

**TRACHY ASPRON** (τὸ τραχύ ἄσπρον) Lit. 'the white concave piece', a term meaning according to context the one-third nomisma of electrum or the billon trachy (1/48th hyperpyron)

introduced by Alexius I in 1092.

**TREMISSIS** (τὸ τριμίσσιον), **TREMIS** or **TRIENS**

The one-third solidus, a coin weighing 1.52 g.

**TRICEPHALON** (τὸ νόμισμα τρικέφαλον, lit. 'three-header') A name often applied to the one-third hyperpyron of the twelfth century and later, since the earliest regular issue had on it a total of three 'heads', those of the emperor, the Virgin and Christ, the last in the form of a medallion held by the Virgin.

**TUFA** (ἡ τοῦφα) A helmet with a fan-shaped crest of peacock feathers sometimes worn by the emperor.

**TYPE** The main design on each face of a coin. By extension, a class of coins united by a common design.

**VICTORY** A winged Victory was one of the few pagan personifications to be retained as coin types after the adoption of Christianity. It disappeared in the early seventh century, and from the reign of Justin I the figure on the solidus was replaced by that of an angel, i.e. by a male figure.

**VOLUMEN** see **SCROLL**

**VOTA** (Lat.) This term, frequently followed by **MVLT(is)** or by a numeral (e.g. **VOT X**), refers to the vows taken quinquennially by Roman magistrates and often recorded on coins. By the fifth century they had become a formality, the precise figures being meaningless, and by the end of the sixth century they had disappeared.



# SELECT BIBLIOGRAPHY

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This does not include the works on points of detail referred to in the notes, but only larger works or collections of material covering substantial periods of time.

## Background works

- Cambridge Medieval History*: Vol. IV, *The Byzantine Empire*, rev. in two vols (Cambridge 1966). The first edition (1923) is still useful for political narrative.
- MANGO, C., *Byzantium. The Empire of New Rome* (London 1980).
- OSTROGORSKY, G., *History of the Byzantine State* (Oxford 1956).
- RUNCIMAN, S., 'Byzantine trade and industry', in *Cambridge Economic History of Europe*: Vol. II, *Trade and industry in the Middle Ages* (Cambridge 1952), 86–118.

## Byzantine numismatics

- BATES, G. E., *Byzantine coins*, Archaeological Exploration of Sardis, Monograph I (Cambridge, Mass. 1971).
- BELL, H. W., *Sardis*: Vol. XI, *The Coins* (Leiden 1916).
- BELLINGER, A. R. and GRIERSON, P., *Catalogue of the Byzantine coins in the Dumbarton Oaks Collection and in the Whittemore Collection* (Washington 1966–): Vol. I, *Anastasius I to Maurice, 491–602* (1966); Vol. II, *Phocas to Theodosius III, 602–717* (1968); Vol. III, *Leo III to Nicephorus III, 717–1081* (1973). Two further volumes are in preparation.
- BENDALL, S. and DONALD, P. J., *The later Palaeologan coinage, 1282–1453* (London 1979).
- BERTELE, T., 'Monete bizantine inedite o rare', *Zeitschrift für Numismatik* xxxvi (1926), 1–36.
- 'L'iperpero bizantino dal 1261 al 1453', *RIN* lix (1957), 70–89.
- BERTELE, T. and MORRISON, C., *Numismatique byzantine* (Wetteren 1978).
- EDWARDS, K. M., *Corinth*: Vol. VI, *Coins, 1896–1929* (Cambridge, Mass. 1933).
- GOODACRE, H., *A handbook of the coinage of the Byzantine Empire*, 2nd edn (London 1957).
- HAHN, W., *Moneta Imperii Byzantini* (Vienna 1973–): Vol. I, 491–565 (1973); Vol. II, 565–610 (1975). A third volume is in preparation. A systematic listing of issues by rulers, mints and dates; more complete than W, *DOC* and *BNC*, though these remain necessary for

- coin descriptions and much of the background.
- HENDY, M. F., *Coinage and money in the Byzantine Empire, 1081–1261*, Dumbarton Oaks Studies XIII (Washington 1969).
- LACAM, G., *Civilisation et monnaies byzantines* (Paris 1974).
- METCALF, D. M., *Coinage in south-eastern Europe 820–1396*, Royal Numismatic Society Special Publication 11 (London 1979).
- MORRISON, C., *Catalogue des monnaies byzantines de la Bibliothèque Nationale (491–1204)*, 2 vols (Paris 1970).
- RATTO, R., *Monnaies byzantines*, sale catalogue (Lugano, 9 December 1930). Reprinted Amsterdam 1959.
- RESTLE, M. S., *Kunst und byzantinische Münzprägung von Justinian I. bis zum Bilderstreit*, Byzantinisch-Neugriechische Jahrbücher, Beiheft 49 (Athens 1964).
- RICOTTI PRINA, D., 'La monetazione siciliana nell'epoca bizantina', *Numismatica* xvi (1950), 26–60.
- *La monetazione aurea delle zecche minori bizantine dal VI al IX secolo* (Rome 1972). Useful for the material illustrated, not for the mint attributions, which are for the most part pure fantasy.
- SABATIER, J., *Description générale des monnaies byzantines*, 2 vols (Paris 1862). Frequently reprinted.
- SCHLUMBERGER, G., *Numismatique de l'Orient latin*, with supplement (Paris 1878–82). Reprinted Graz 1954.
- SEAR, D. R., *Byzantine coins and their values* (London 1974).
- SPAHR, R., *Le monete siciliane dai Bizantini a Carlo I d'Angiò (582–1282)* (Zürich-Graz 1976).
- THOMPSON, M., *The Athenian Agora: Vol. II, Coins from the Roman through the Venetian period* (Princeton 1954).
- TOLSTOI, J., *Monnaies byzantines*, 8 parts (St Petersburg 1912–14). Reprinted Amsterdam 1968. Unfinished; ends with Basil I.
- WAAGE, D. B., *Antioch-on-the-Orontes: Vol. IV Pt 2, Greek, Roman, Byzantine and Crusaders' coins* (Princeton 1952).
- WHITTING, P. D., *Byzantine coins* (London 1973).
- WROTH, W., *Catalogue of the Imperial Byzantine coins in the British Museum*, 2 vols (London 1908).
- WROTH, W., *Catalogue of the coins of the Vandals, Ostrogoths and Lombards, and of the Empires of Thessalonica, Nicaea and Trebizond in the British Museum* (London 1911).
- ZAKYTHINOS, D. A., *Crise monétaire et crise économique à Byzance du XIII<sup>e</sup> au XV<sup>e</sup> siècle* (Athens 1948). Reprinted as no. XI in his *Byzance: État-Société-Économie* (London 1973).

# PLATES

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## Notes

### METAL

The standard abbreviations are used (AV, AR, AE, E1, B).

### DATES

Dates of emperors are given only on the first occurrence of their names on each plate. Those ascribed to individual issues are sometimes certain (e.g. for consular coins), sometimes only approximate. The numbering of classes for the period 603–1081 follows that of *DOC* 2 and 3, with the convention there employed of using roman numerals for AV and AR, arabic ones for AE. For coins of the period 1081–1204 Hendy's system is in general followed, with classes or types being numbered only when the order of issue is certain and otherwise being classed alphabetically, but for his 'First coinage' (etc.) I have substituted 'Class 1' (etc.).

### PROVENANCES

The majority of the coins illustrated are in the Dumbarton Oaks or Whittemore collections, and are fully described in *DOC*. Coins for which no provenance is given are at Dumbarton Oaks. Other collections are abbreviated as follows:

- ANS American Numismatic Society, New York
- BM British Museum, London
- BN Bibliothèque Nationale (Cabinet des Médailles), Paris
- FW Fitzwilliam Museum, Cambridge
- O Ashmolean Museum, Oxford
- Wh. Whittemore collection, Fogg Museum, Cambridge, Mass.

### NUMBERS IN SQUARE BRACKETS

These give the pages in the text where each coin is mentioned or discussed.

### Plate 1 Medalllic and ceremonial coins, AV, AR, 491–610

Nos 1–6 are AV, nos 7–14 are AR. All save no. 13 (Carthage) are of Constantinople. The weights of nos 2 and 3 are not given, since they are mounted (mounts not shown).

- |   |  |
|---|--|
| 1 Anastasius I (491–518), aureus (1/60th lb), 5.34 g    | 8 Anastasius I, half miliarensis, 1.97 g                           |
| 2 Maurice (582–602), 6-solidus medallion, 583 or 602    | 9 Justin II (565–78), half miliarensis, 2.36 g                     |
| 3 Anastasius I, marriage solidus, 491                   | 10 Justinian I, miliarensis, 4.10 g                                |
| 4 Tiberius II (578–82), consular solidus, 579, 4.40 g   | 11 Justinian I, miliarensis, 4.11 g                                |
| 5 Maurice, consular solidus, 583 or 602, 4.45 g         | 12 Tiberius II, half miliarensis, 2.15 g                           |
| 6 Phocas (602–10), consular solidus, 603, 4.33 g        | 13 Maurice, half miliarensis, 1.89 g                               |
| 7 Justinian I (527–65), medallion (miliarensis), 4.16 g | 14 Maurice, half miliarensis, 2.17 g                               |
|   | 2 New York, Metropolitan Museum of Art; 7 BN; 12 Leningrad (T. 23) |

### Plate 2 Eastern gold coins, 491–610

The coins are solidi except nos 27 and 29 (semisses), 28 and 30 (tremisses) and no. 31 (half tremissis). Nos 32–5 are light-weight solidi, nos 32 and 35 of 20 carats and nos 33 and 34 of 21½ carats. All were struck at Constantinople except no. 36 (Alexandria or Cyprus). The abnormally low weight of no. 18 is unexplained.

- |   |  |
|---|--|
| 15 Anastasius I (491–518), 4.47 g         | 28 Anastasius I, 1.50 g  |
| 16 Anastasius I, 4.46 g                   | 29 Maurice, 2.22 g   |
| 17 Justin I (518–27), 4.43 g              | 30 Tiberius II, 1.48 g   |
| 18 Justin I, 3.76 g                       | 31 Justin II, 0.80 g   |
| 19 Justin I and Justinian I (527), 4.47 g | 32 Justinian I, 3.72 g   |
| 20 Justinian I (527–65), 4.49 g           | 33 Justin II, 4.09 g   |
| 21 Justinian I, 4.45 g                    | 34 Maurice, 4.04 g   |
| 22 Justin II (565–78), 4.46 g             | 35 Phocas, Class (e), 3.64 g                                       |
| 23 Tiberius II (578–82), 4.41 g           | 36 'Interregnum', Heraclius consul (608–10), Class I (608), 4.46 g |
| 24 Maurice (582–602), 4.38 g              |  |
| 25 Phocas (602–10), Class Ia, 4.35 g      | 18, 24, 28 Wh.; 35 Birmingham, Barber Institute of Fine Arts       |
| 26 Phocas, Class IVa, 4.49 g              |  |
| 27 Anastasius I, 2.13 g                   |  |

### Plate 3 Western gold and silver coins, 534–c. 623

Nos 37–47, 54 and 55 are AV, nos 48–53 and 56–62 are AR. Mints are as follows: Rome, no. 37; Ravenna, nos 38–41, 56–62; Carthage, nos 42–53; Spain, nos 54, 55. The abnormally low weight of no. 43 is unexplained.

- |  |                                     |
|--|-------------------------------------|
| 37 Justinian I (527–65), solidus, 538/46, 4.42 g | 40 Phocas (602–10), solidus, 4.47 g |
| 38 Justin II (565–78), solidus, 4.31 g           | 41 Maurice, tremisis, 1.50 g        |
| 39 Maurice (582–602), solidus, 4.49 g            | 42 Justinian I, solidus, 4.43 g     |

- |  |   |
|--|---|
| 43 Justin II, solidus, 3.62 g  | 1.38 g (base AV)  |
| 44 Maurice, solidus, Indiction 8 (589/90), 4.44 g                                | 56 Justinian I, 250-nummus piece (heavy series), 552/65, 1.32 g |
| 45 Maurice, solidus, Indiction 5 (601/2), 4.34 g                                 | 57 Justinian I, 125-nummus piece (light series), 552/65, 0.50 g |
| 46 Phocas, solidus, Indiction 7 (603/4), 4.43 g                                  | 58 Justinian I, 120-nummus piece (heavy series), 552/65, 0.67 g |
| 47 'Interregnum', Heraclius consul (608–10), solidus, Indiction 11 (608), 4.42 g | 59 Justinian I, uncertain denomination, 552/65, 1.43 g          |
| 48 Justinian I, half miliarensis, 534/65, 1.24 g                                 | 60 Justinian I, uncertain denomination, 552/65, 0.34 g          |
| 49 Justinian I, half miliarensis (?), 534/65, 1.01 g                             | 61 Justin II, 250-nummus piece, 0.55 g                          |
| 50 Justin II, half miliarensis, 0.99 g   | 62 Phocas, uncertain denomination, 0.41 g                       |
| 51 Justin II, half miliarensis, 0.94 g   |   |
| 52 Maurice, half miliarensis, 0.99 g   |   |
| 53 Theodosius, son of Maurice (602), uncertain denomination, 0.73 g              |   |
| 54 Phocas, tremissis, 1.46 g (base AV)   |   |
| 55 Heraclius (610–41), tremissis, 610/c.625,                                     | 38 Wh.; 50 Glasgow, Hunterian Museum                            |

### Plate 4 Anastasius I (491–518), AE

- |  |   |
|--|---|
| 63 Constantinople, follis, small series, 7.59 g          | 72 Constantinople, follis, large series, 18.04 g  |
| 64 Nicomedia, follis, small series, 9.38 g               | 73 Constantinople, follis, large series, 17.97 g  |
| 65 Constantinople, half follis, small series, 4.30 g     | 74 Constantinople, half follis, large series, 8.62 g  |
| 66 Nicomedia, half follis, small series, 5.03 g          | 75 Antioch, half follis, large series, 8.55 g   |
| 67 Constantinople, decanummium, small series, 1.97 g     | 76 Constantinople, decanummium, large series, 4.38 g  |
| 68 Nicomedia, decanummium, small series, 1.92 g          | 77 Constantinople, nummus, 0.62 g   |
| 69 Constantinople, follis, with figured reverse, 16.79 g | 78 Antioch, pentanummium, large series, 2.28 g  |
| 70 Constantinople, half follis, same series, 8.54 g      | 79 Constantinople, pentanummium, 2.09 g   |
| 71 Constantinople, decanummium, same series, 3.85 g      | 65, 66, 72 Wh.; 69 Berlin; 71 Birmingham, Barber Institute of Fine Arts; 74 BM; 75, 77, 78 BN |

### Plate 5 Constantinople: folles, AE, 539–608

- |   |   |
|---|---|
| 80 Justinian I (527–65), Year 12 (538/9), 25.55 g | 85 Maurice (582–602), Year 7 (588/9), 11.31 g       |
| 81 Justinian I, Year 18 (544/5), 19.90 g          | 86 Maurice, consular follis, Year 20 (602), 12.33 g |
| 82 Justinian I, Year 29 (555/6), 17.78 g          | 87 Phocas (602–10), Year 1 (602/3), 12.15 g         |
| 83 Justin II (565–78), Year 8 (572/3), 13.30 g    | 88 Phocas, Year 6 (607/8), 11.48 g                  |
| 84 Tiberius II (578–82), Year 7 (580/1), 12.50 g  |   |

### Plate 6 Constantinople: fractional AE, 518–610

- |  |  |
|--|--|
| 89 Tiberius II (578–82), three-quarter follis, 11.69 g | 90 Phocas (602–10), three-quarter follis, Year 6 (607/8), 8.26 g |
|--|--|

- |  |   |
|--|---|
| 91 Justinian I (527–65), half follis, Year 14 (540/1), 10.50 g | 97 Tiberius II, decanummium, 3.99 g           |
| 92 Justin II (565–78), half follis, Year 7 (571/2), 7.53 g     | 98 Maurice, decanummium, 3.11 g               |
| 93 Tiberius II, half follis, 7.59 g                            | 99 Justin I (518–27), pentanummium, 1.92 g    |
| 94 Maurice (582–602), half follis, Year 11 (592/3), 5.65 g     | 100 Justin I, pentanummium, 2.01 g            |
| 95 Justinian I, decanummium, Year 24 (550/1), 3.59 g           | 101 Justinian I, pentanummium, 538/42, 3.54 g |
| 96 Justin II, decanummium, 3.86 g                              | 102 Justin II, pentanummium, 1.86 g           |
|  | 103 Tiberius II, pentanummium, 3.04 g         |
|  | 104 Maurice, pentanummium, 2.17 g             |
|  | 82, 92, 93, 96, 100 Wh.                       |

### Plate 7 Thessalonica: AE, 518–610

The identity of the units to which the values of nos 107–11 refer is uncertain. The AP accompanying the numerals perhaps stands for *argyroi*, i.e. units which like *denarii* had originally implied silver coins but as a result of debasement had now become notional copper ones.

- |   |  |
|---|--|
| 105 Justin I (518–27), follis, 18.14 g                            | 117 Justin II, pentanummium, 1.92 g                                      |
| 106 Justin I, half follis, 6.40 g                                 | 118 Tiberius II (578–82), half follis, Year 6 (579/80), 5.48 g           |
| 107 Justinian I (527–65), 16-unit piece, 6.82 g                   | 119 Maurice (582–602), half follis, Year 19 (600/1), 4.91 g              |
| 108 Justinian I, 16-unit piece, 7.74 g                            | 120 Maurice, decanummium, Year 21 (602), 2.49 g                          |
| 109 Justinian I, 8-unit piece, 3.92 g                             | 121 Phocas (602–10), follis, Year 5 (606/7), 10.89 g                     |
| 110 Justinian I, 4-unit piece, 1.45 g                             | 122 Phocas, half follis, Year 1 (602/3), 7.69 g                          |
| 111 Justinian I, 2-unit piece, weight unknown                     | 123 Phocas, half follis, 603/10, 6.23 g                                  |
| 112 Justinian I, half follis, Year 37 (563/4), 5.26 g             | 111 Münzhandlung Basel, <i>Liste 13</i> (November 1938), no. 86; 120 ANS |
| 113 Justinian I, decanummium (rev. only), Year 38 (564/5), 2.62 g |  |
| 114 Justin II (565–78), half follis, Year 3 (567/8), 5.52 g       |  |
| 115 Justin II, half follis, Year 8 (572–3), 5.77 g                |  |
| 116 Justin II, decanummium, Year 5 (569/70), 2.70 g               |  |

### Plate 8 Nicomedia and Cyzicus: AE, 518–610

- |  |  |
|--|--|
| 124 Justin I (518–27), Cyzicus, follis, 16.88 g              | 130 Maurice (582–602), Cyzicus, decanummium, 2.50 g              |
| 125 Justinian I (527–65), Nicomedia, follis, 527/38, 16.87 g | 131 Justinian I, Nicomedia, decanummium, Year 34 (560/1), 2.24 g |
| 126 Justin I, Nicomedia, pentanummium, 2.06 g                | 132 Maurice, Cyzicus, follis, Year 3 (584/5), 12.12 g            |
| 127 Justinian I, Nicomedia, follis, Year 12 (538/9), 23.54 g | 133 Maurice, Cyzicus, half follis, Year 2 (583/4), 5.38 g        |
| 128 Justin II (565–78), Cyzicus, pentanummium, 1.66 g        | 134 Phocas (602–10), Cyzicus, half follis, 606/10, 5.07 g        |
| 129 Justin II, Nicomedia, follis, Year 11 (575/6), 12.61 g   |  |

- 135 Justin II, Cyzicus, decanummius, Year 1 (566), 2.55 g  
 136 Maurice, Nicomedia, half follis, Year 5 (586/7), 5.90 g  
 137 Maurice, Nicomedia, decanummius, 3.08 g  
 125, 126 Wh.

### Plate 9 Antioch: AE, 512–610

- 138 Justin I (518–27), follis, 14.56 g  
 139 Justinian I (527–65), follis, 529/33, 16.87 g  
 140 Justinian I, follis, Year 21 (547/8), 19.34 g  
 141 Justinian I, half follis, 529/33, 9.03 g  
 142 Justinian I, half follis, Year 26 (552/3), 9.13 g  
 143 Justin II (565–78), follis, Year 9 (573/4), 13.06 g  
 144 Tiberius II (578–82), half follis (579?), 8.08 g  
 145 Justin I, pentanummius, 1.65 g  
 146 Maurice (582–602), half follis, Year 3 (584/5), 6.31 g  
 147 Justin II, decanummius, Year 10 (564/5)  
 148 Maurice, decanummius, Year 3 (584/5), 2.94 g  
 149 Justinian I, pentanummius, 546/51, 2.26 g  
 150 Justinian I, pentanummius, 560/5, 1.78 g  
 151 Maurice, pentanummius, 1.41 g  
 152 Phocas (602–10), follis, Year 4 (605/6), 10.54 g  
 139, 140 Wh.

### Plate 10 Alexandria and minor eastern mints: AE, 518–610

Nos 153–8, Alexandria; nos 164–6, Alexandretta; nos 159–63, Cherson; no. 167, Cyprus.

- 153 Justin I (518–27), dodecanummius, 4.02 g  
 154 Justinian I (527–65), 33-nummus piece, 11.44 g  
 155 Justinian I, dodecanummius, 4.86 g  
 156 Justinian I, hexanummius, 3.06 g  
 157 Tiberius II (578–82), dodecanummius, 4.77 g  
 158 Phocas (602–10), dodecanummius, 5.20 g  
 159 Justinian I, pentanummius, 2.55 g  
 160 Justinian I, pentanummius, 3.2 g  
 161 Maurice (582–602), follis, 602 (?), 11.80 g  
 162 Maurice, follis, 602 (?), 13.24 g  
 163 Maurice, half follis, 602 (?), 5.03 g  
 164 Revolt of Heraclius (608–10), follis, 610, 11.03 g  
 165 Revolt of Heraclius, follis, 610, 9.51 g  
 166 Revolt of Heraclius, half follis, 610, 6.01 g  
 167 Revolt of Heraclius, follis, 610  
 160 Leningrad (T. 515); 164 BN; 165 Birmingham, Barber Institute of Fine Arts; 166 ANS; 167 in trade (1964)

### Plate 11 Carthage: AE, 534–610

- 168 Justinian I (527–65), follis, 534/9, 15.30 g  
 169 Justinian I, follis, 534/9, 14.18 g  
 170 Justinian I, half follis, 534/9, 6.15 g  
 171 Justinian I, follis, Year 14 (540/1), 22.98 g  
 172 Justinian I, pentanummius, 539/43, 2.79 g  
 173 Justinian I, pentanummius, 548/9, 2.66 g  
 174 Justinian I, decanummius, 548/9, 5.01 g  
 175 Justinian I, decanummius, Year 14 (540/1), 6.26 g  
 176 Justin II (565–78), half follis, Year 10 (574/5), 7.71 g  
 177 Justin II, decanummius, 566/72, 4.02 g  
 178 Justinian I, nummus, Year 14 (540/1), 0.80 g

- |  |   |
|--|---|
| 179 Maurice (582–602), 2-nummus piece, 582/3, 0.91 g | 184 Revolt of Heraclius (608–10), half follis, 7.78 g |
| 180 Maurice, follis, 582/3, 15.11 g                  | 185 Maurice, decanummius, 602, 3.81 g                 |
| 181 Maurice, half follis, 585/601, 9.70 g            | 171 Wh.; 184 FW                                       |
| 182 Maurice, pentanummius, 585/601, 1.91 g           |   |
| 183 Justin II, half follis, Year 8 (572/3), 8.71 g   |   |

### Plate 12 Rome and Sicily: AE, 538–610

Nos 186–200, 202–3, Rome; no. 201, uncertain mint, perhaps African; no. 204, 'Sicily'; nos 205–8, Catania.

- |   |   |
|---|---|
| 186 Justinian I (527–65), follis, 537(?), 10.03 g     | 200 Justinian I, nummus, 547/65, 0.73 g           |
| 187 Justinian I, follis, 538/44, 16.61 g              | 201 Justinian I, nummus, 0.66 g                   |
| 188 Justinian I, half follis, 538/44, 6.12 g          | 202 Maurice, decanummius, 1.93 g                  |
| 189 Justinian I, pentanummius, 538/44, 4.09 g         | 203 Phocas (602–10), decanummius, 1.91 g          |
| 190 Justinian I, decanummius, 537(?), 3.2 g           | 204 Maurice, decanummius, 3.92 g                  |
| 191 Justin II (565–78), pentanummius, 1.82 g          | 205 Maurice, decanummius, Year 1 (582/3), 1.93 g  |
| 192 Justin II, pentanummius, 1.35 g                   | 206 Maurice, decanummius, Year 13 (594/5), 2.93 g |
| 193 Justinian I, follis, 12.97 g                      | 207 Maurice, pentanummius, 1.09 g                 |
| 194 Justinian I, half follis, Year 31 (557/8), 9.68 g | 208 Phocas, decanummius, Year 4 (605/6), 2.95 g   |
| 195 Justinian I, decanummius, 547/65, 4.98 g          | 190 Leningrad (T. 445); 193 BM                    |
| 196 Justin II, half follis, 4.63 g                    |   |
| 197 Tiberius II (578–82), half follis, 5.11 g         |   |
| 198 Maurice (582–602), half follis, 5.97 g            |   |
| 199 Justinian I, nummus, 537(?), 0.84 g               |   |

### Plate 13 Ravenna and related mints: AE, 527–610

Nos 209–21, Ravenna (no. 212 not certain); nos 222–5, a military mint operating in the north-western Balkans, probably at Salona; nos 226 and 227, uncertain mints in Italy.

- |   |  |
|---|--|
| 209 Justinian I (527–65), follis, Year 24 (560/1), 8.85 g | 219 Phocas, half follis, 608/9, 4.15 g                               |
| 210 Justinian I, half follis, Year 23 (559/60), 5.34 g    | 220 Phocas, half follis, 3.87 g                                      |
| 211 Justinian I, decanummius, Year 25 (561/2), 3.01 g     | 221 Phocas, decanummius, 608/9                                       |
| 212 Justinian I, decanummius, 3.35 g                      | 222 Justinian I, follis, 5.17 g                                      |
| 213 Maurice (582–602), follis, Year 2 (583/4), 7.36 g     | 223 Justinian I, half follis, 3.23 g                                 |
| 214 Maurice, follis, Year 5 (586/7)                       | 224 Justinian I, half follis, 2.04 g                                 |
| 215 Maurice, half follis, 583/4, 2.83 g                   | 225 Justinian I, decanummius, 1.40 g                                 |
| 216 Maurice, half follis, 4.97 g                          | 226 Tiberius II (578–82), decanummius, 3.34 g                        |
| 217 Maurice, decanummius, 2.28 g                          | 227 Maurice, decanummius, 1.96 g                                     |
| 218 Phocas (602–10), follis, Year 7 (608/9), 9.30 g       | 214 ANS; 215 BM (W. 20); 221 Baranowsky sale (22 June 1931), lot 165 |



### Plate 14 Anomalous AE of the sixth century

- |  |   |
|--|---|
| 228 Justinian I (527–65), follis, Year 14 (540/1), 24.86 g | 237 Justin II, half follis, Year 8 (572/13), 4.81 g       |
| 229 Justinian I, half follis, Year 15 (541/2), 5.29 g      | 238 Tiberius II (578–82), follis, Year 7 (580/1), 10.80 g |
| 230 Justinian I, half follis, Indiction 2 (552/3), 7.33 g  | 239 Maurice (582–602), follis, Year 2 (583/4), 11.13 g    |
| 231 Justinian I, half follis, Year 26 (552/3), 4.59 g      | 240 Maurice, half follis, Year 10 (591/2), 5.30 g         |
| 232 Justinian I, decanummium, Year 26 (552/3), 5.02 g      | 241 Maurice, half follis, Year 10 (591/2), 3.91 g         |
| 233 Justinian I, Year 26 (552/3), decanummium, 2.33 g      | 242 Maurice, half follis, Year 10 (591/2), 5.44 g         |
| 234 Justinian I, decanummium, 4.26 g                       | 243 Maurice, half follis, Year 11 (592/3), 10.18 g        |
| 235 Justin II (565–78), follis, Year 10 (574/5), 10.00 g   | 244 Maurice, decanummium, 4.19 g                          |
| 236 Justin II, follis, Year 10 (574/5), 8.63 g             | 245 Maurice, pentanummium, 2.46 g                         |
|  | 228 BN; 238, 242 BM                                       |

### Plate 15 Pseudo-imperial coins

Nos 246–50 are solidi (AV), nos 251–63 are tremisses (AV), and nos 264–70 are various denominations of silver.

- |  |  |
|--|--|
| 246 <i>Ostrogoths</i> . Theoderic, in name of Anastasius, 493/518, 4.43 g  | 258 <i>Ostrogoths</i> . Theoderic, in name of Anastasius, 493/518, 1.46 g            |
| 247 <i>Burgundians</i> . Gundobald, in name of Anastasius, 491/516, 4.41 g | 259 <i>Franks</i> , mid-sixth century, 1.39 g  |
| 248 <i>Franks</i> , in name of Anastasius, 491/518, 4.47 g                 | 260 <i>Alamanni</i> (?), mid-sixth century, 1.41 g                                   |
| 249 <i>Visigoths</i> , in name of Justinian, 527/65, 4.38 g                | 261 <i>Lombards</i> (north Italy), in name of Maurice, early seventh century, 1.46 g |
| 250 <i>Provençal</i> (Marseilles), in name of Maurice, c. 602, 3.85 g      | 262 <i>Lombards</i> (Tuscany), in name of Heraclius, early seventh century, 1.29 g   |
| 251 <i>Burgundians</i> . Gundobald, in name of Anastasius, 491/516, 1.48 g | 263 <i>Lombards</i> (Tuscany), late seventh century                                  |
| 252 <i>Burgundians</i> . Gundomar II, in name of Justin I, 524/27, 1.43 g  | 264 <i>Odovacar</i> (476–91), 0.86 g   |
| 253 <i>Visigoths</i> , in name of Anastasius, 491/516, 1.48 g              | 265 <i>Ostrogoths</i> . Theoderic, in name of Anastasius, 493/518, 1.31 g            |
| 254 <i>Visigoths</i> , in name of Justin I, 518/27, 1.38 g                 | 266 <i>Ostrogoths</i> . Theoderic, in name of Justin I, 518/526, 0.73 g              |
| 255 <i>Visigoths</i> , mid-sixth century, 1.40 g                           | 267 <i>Ostrogoths</i> . Witiges (536–40), 1.30 g                                     |
| 256 <i>Suevi</i> , in name of Valentinian III, mid-sixth century, 1.30 g   | 268 <i>Ostrogoths</i> . Baduila (541–52), 1.40 g                                     |
| 257 <i>Provençal</i> (Marseilles), in name of Maurice, c. 590, 1.07 g      | 269 <i>Vandals</i> . Gaiseric, in name of Honorius, 439/77                           |
|  | 270 <i>Vandals</i> . Thrasamund (496–523), 50-denarius piece, 0.94 g                 |
|  | All FW except no. 250 (BM)   |

## Plate 16 Constantinople: gold coinage, 610–68

Nos 271–87 are solidi, nos 288 and 290 semisses, and no. 289 a tremissis.

- |  |  |
|--|--|
| 271 Heraclius (610–41), Class I (610/13), 4.50 g   | 283 Constans II, Class IIIc (651/4), 4.42 g          |
| 272 Heraclius, Class IIa (613/c. 616), 4.35 g      | 284 Constans II, Class IVa (654/9)                   |
| 273 Heraclius, Class IIIf (c. 616/c. 625), 4.48 g  | 285 Constans II, Class Vb (659/c. 661)               |
| 274 Heraclius, Class IIo (c. 626/629), 4.45 g      | 286 Constans II, Class VIa (c. 661/c. 663)           |
| 275 Heraclius, Class IIb (629/31), 4.30 g          | 287 Constans II, Class VIIc (c. 663/668), 4.50 g     |
| 276 Heraclius, Class IVa (632/c. 635), 4.43 g      | 288 Heraclius, semissis, Class II (613?/641), 2.21 g |
| 277 Heraclius, Class IVd (636/7?), 4.48 g          | 289 Heraclius, tremissis, Class II, 1.42 g           |
| 278 Heraclius Constantine (641), 4.34 g            | 290 Constans II, semissis, 2.21 g                    |
| 279 Heraclonas (641), 4.43 g                       |  |
| 280 Constans II (641–68), Class Ia (641/6), 4.46 g | 278 O (Goodacre collection); 282 BN                  |
| 281 Constans II, Class Ie (647), 4.49 g            |  |
| 282 Constans II, Class IIa (647/8), 4.41 g         |  |

## Plate 17 Constantinople: gold coinage, 668–717

Nos 291–305 are solidi, nos 308–10 semisses, nos 306 and 307 tremisses, and no. 311 a half tremissis.

- |  |  |
|--|--|
| 291 Constantine IV (668–85), Class Ia (668), 4.44 g        | 302 Justinian II, restored, Class IIb (705/11), 4.46 g |
| 292 Constantine IV, Class IIa (668/73), 4.44 g             | 303 Philippicus (711–13), Var. a, 4.43 g               |
| 293 Constantine IV, Class IIc (668/73), 4.40 g             | 304 Anastasius II (713–15), Var. a, 4.47 g             |
| 294 Constantine IV, Class IIc (674/81), 4.39 g             | 305 Theodosius III (715–17), Var. a, 4.46 g            |
| 295 Constantine IV, Class IVc (681/5), 4.36 g              | 306 Justinian II, Class Ib, 1.34 g                     |
| 296 Justinian II (685–95), Class Ib (686/7), 4.43 g        | 307 Justinian II, Class II, 1.40 g                     |
| 297 Justinian II, Class Id (686/7), 4.46 g                 | 308 Justinian II, Class III, 2.04 g                    |
| 298 Justinian II, Class IIa (687/92), 4.41 g               | 309 Leontius, 2.18 g                                   |
| 299 Leontius (695–8), Var. a, 4.31 g                       | 310 Justinian II, restored, Class IIb, 2.18 g          |
| 300 Tiberius III (698–705), Var. a, 4.46 g                 | 311 Philippicus, 0.68 g                                |
| 301 Justinian II, restored (705–11), Class I (705), 4.42 g | 298 BM; 306 BN; 307 Wh.                                |

## Plate 18 Unusual AV and AR, 610–717

Nos 312–16 are solidi of full weight, nos 317–22 are light-weight solidi, nos 323–9 are AR.

- |   |  |
|---|--|
| 312 Heraclius (610–41), solidus (of uncertain mint), 4.45 g | 317 Heraclius, light-weight solidus (20 carats), 3.69 g            |
| 313 Heraclius, solidus (of uncertain mint), 4.46 g          | 318 Heraclius, light-weight solidus (23 carats), 4.34 g            |
| 314 Heraclius, solidus, of Alexandria (610/11), 4.45 g      | 319 Constans II (641–68), light-weight solidus (23 carats), 4.24 g |
| 315 Heraclius, solidus (of Jerusalem?), 4.41 g              |  |
| 316 Heraclius, solidus (of Thessalonica), 4.42 g            |  |

- |   |  |
|---|--|
| 320 Constans II, light-weight solidus (23 carats), 4.23 g           | 326 Constans II, ceremonial AR, 3.76 g   |
| 321 Constans II, light-weight solidus (20 carats), 3.67 g           | 327 Constantine IV (668–85), ceremonial AR, 4.62 g   |
| 322 Justinian II (685–95), light-weight solidus (23 carats), 4.12 g | 328 Tiberius III (698–705), ceremonial AR, 3.34 g  |
| 323 Heraclius, ceremonial hexagram (of Ravenna?), 7.00 g            | 329 Theodosius III (715–17), AR from solidus dies, 2.73 g                                  |
| 324 Heraclius, ceremonial AR, 4.0 g                                 | 312 Yale University collection; 313, 318 BN; 324 Leningrad (T. 36); 325 Leningrad (T. 223) |
| 325 Heraclius, ceremonial AR, 3.45 g                                |  |

### Plate 19 Silver coinage, 610–717

Nos 330–44, Constantinople; nos 345–9, Ravenna; nos 350–1, Rome. Nos 330–44 are hexagrams, nos 349–51 small AR of uncertain denomination.

- |  |  |
|--|--|
| 330 Heraclius (610–41), Class Id (615/38), 6.65 g  | 342 Constantine IV, Class IIIc (674/81), 6.01 g      |
| 331 Heraclius, Class Ie (615/38), 6.49 g           | 343 Justinian II (685–95), Class III (692/5), 6.41 g |
| 332 Heraclius, Class Id (615/38), 6.77 g           | 344 Tiberius III (698–705), 6.07 g                   |
| 333 Heraclius, Class II (638/41), 6.28 g           | 345 Heraclius, Class Ia, 0.39 g                      |
| 334 Heraclonas (641), 6.34 g                       | 346 Heraclius, Class IIa, 0.43 g                     |
| 335 Constans II (641–68), Class I (641/7), 5.93 g  | 347 Constans II, Class I, 0.34 g                     |
| 336 Constans II, Class II (647/51), 5.22 g         | 348 Constans II, Class II, 0.38 g                    |
| 337 Constans II, Class IVb (654/9), 6.15 g         | 349 Constantine IV, 0.31 g                           |
| 338 Constans II, Class Va (659/68), 6.41 g         | 350 Constans II, 0.30 g                              |
| 339 Constantine IV (668–85), Class I (668), 6.34 g | 351 Justinian II, 0.32 g                             |
| 340 Constantine IV, Class IIa (668/73), 6.76 g     |  |
| 341 Constantine IV, Class IIc (668/73), 5.54 g     | 334, 339, 342, 345, 347, 348, 349 Wh.                |

### Plate 20 Constantinople: AE, 610–41

The coins are all of Heraclius (610–41).

- |  |   |
|--|---|
| 352 Follis, Class 1, Year 1 (610/11), 10.68 g      | 361 Half follis, Class 2, Year 6 (615/16), 4.38 g   |
| 353 Follis, Class 2, Year 3 (613), 9.57 g          | 362 Half follis, Class 5a, Year 20 (629/30), 5.59 g |
| 354 Follis, Class 3, year obscure (615/24), 9.50 g | 363 Half follis, Class 5b, Year 30 (639/40), 1.43 g |
| 355 Follis, Class 4, Year 17 (626/7), 5.40 g       | 364 Decanummium, Class 2, Year 4 (613/14), 2.68 g   |
| 356 Follis, Class 5a, Year 20 (629/30), 10.09 g    | 365 Decanummium, Class 3, Year 8 (617/18), 1.94 g   |
| 357 Follis, Class 5b, Year 23 (632/3), 5.40 g      | 366 Pentanummium, Class 2, 1.17 g                   |
| 358 Follis, Class 6, Year 31 (640/1), 4.61 g       |   |
| 359 Three-quarter follis, Year 20 (629/30), 4.73 g |   |
| 360 Half follis, Class 1, Year 1 (610/11), 5.20 g  |   |

### Plate 21 Constantinople: AE, 641–68

The coins are all of Constans II (641–68). No. 378 has a *theta* in the exergue which may indicate the mint of Thessalonica.

- |   |   |
|---|---|
| 367 Follis, Class 1, Year 1 (641/2), 4.61 g     | 378 Follis, Class 11b, year uncertain, 3.87 g     |
| 368 Follis, Class 2, Year 2 (642/3), 4.61 g     | 379 Half follis, Class 2 (641/c. 646), 1.85 g     |
| 369 Follis, Class 2 bis, Year 3 (643/4), 5.36 g | 380 Half follis, Class 3 (647?), 1.43 g           |
| 370 Follis, Class 3, Year 3 (643/4), 6.16 g     | 381 Half follis, Class 4 (655/6?), 1.49 g         |
| 371 Follis, Class 4, Year 6 (646/7), 6.57 g     | 382 Half follis, Class 5, Year 16 (656/7), 2.56 g |
| 372 Follis, Class 4, year uncertain, 5.63 g     | 383 Half follis, Class 5 bis (659/60), 2.04 g     |
| 373 Follis, Class 5a, Year 11 (651/2), 3.69 g   | 384 Half follis, Class 6 (660/8), 2.39 g          |
| 374 Follis, Class 5b, Year 14 (654/5), 3.44 g   | 385 Decanummium, year uncertain, 1.79 g           |
| 375 Follis, Class 8, Year 17 (657/8), 3.17 g    | 372, 381 Wh.                                      |
| 376 Follis, Class 9, Year 19 (659/60), 4.38 g   |   |
| 377 Follis, Class 11b, year uncertain, 4.42 g   |   |

### Plate 22 Constantinople: AE, 668–85

The coins are all of Constantine IV (668–85).

- |   |  |
|---|--|
| 386 Follis, Class 1 (668/73), 18.62 g         | 392 Half follis, Class 3 (674/85), 9.36 g  |
| 387 Follis, Class 3 (674), 16.87 g            | 393 Half follis, Class 3 (674/85), 7.19 g  |
| 388 Follis, Class 5, Year 30 (683/4), 17.61 g | 394 Decanummium, Class 1 (668/73), 4.22 g  |
| 389 Three-quarter follis (668/74), 12.33 g    | 395 Decanummium, Class 2 (674/85), 4.85 g  |
| 390 Half follis, Class 1 (673), 9.55 g        | 396 Pentanummium, Class 1 (668/73), 1.43 g |
| 391 Half follis, Class 2 (674), 7.23 g        |  |

### Plate 23 Constantinople: AE, 685–717

- |   |   |
|---|---|
| 397 Justinian II (685–95), follis, Class 2, Year 2 (686/7), 10.07 g         | 405 Theodosius III (715–17), follis, Year 1 (715/16), 3.19 g                |
| 398 Leontius (695–8), follis, Year 1 (695/6), 7.85 g                        | 406 Justinian II, restored, follis, Class 2, year uncertain, 2.54 g         |
| 399 Tiberius III (698–705), follis, Class 1, Year 1 (698/9), 7.99 g         | 407 Justinian II, restored, half follis, Class 1, Year 20 (705), 4.61 g     |
| 400 Tiberius III, follis, Class 2, Year 4 (701/2), 3.65 g                   | 408 Justinian II, first reign, half follis, Class 2, Year 3 (687/8), 3.70 g |
| 401 Justinian II, restored (705–11), follis, Class 1, Year 20 (705), 6.86 g | 409 Leontius, half follis, Year 1 (695/6), 4.02 g                           |
| 402 Justinian II, restored, follis, Class 2, Year 21 (705/6), 5.18 g        | 410 Tiberius III, half follis, Class 1, Year 1 (698/9), 3.52 g              |
| 403 Philippicus (711–13), follis, Year 1 (711/12), 2.89 g                   | 411 Justinian II, restored, half follis, Class 2, Year 20 (705), 1.25 g     |
| 404 Anastasius II (713–15), follis, Year 1 (713/14), 4.36 g                 | 412 Philippicus, decanummium, Year 1 (711/12), 1.77 g                       |
|   | 398, 412 Wh.  |

## Plate 24 Secondary eastern mints: AE, 610–c. 670

Nos. 413–23 are coins of Heraclius.

- |  |   |
|--|---|
| 413 Thessalonica, follis, Class 2, Year 5 (614/15), 9.91 g       | 421 Cyzicus, follis, Class 2, Year 3 (612/13), 11.19 g  |
| 414 Thessalonica, half follis, Class 2, Year 9 (618/19), 6.17 g  | 422 Cyzicus, follis, Class 4, Year 19 (628/9), 6.76 g   |
| 415 Thessalonica, follis, Class 3, Year 20 (629/30), 4.73 g      | 423 Cyzicus, half follis, Class 4, year uncertain, 4.08 g   |
| 416 Thessalonica, three-quarter follis, Year 20 (629/30), 4.87 g | 424 Two Heraclian countermarks on follis of Heraclius of Year 20, 11.60 g                               |
| 417 Nicomedia, follis, Class 1, Year 1 (610/11), 10.75 g         | 425 Heraclian countermark on early sixth-century follis   |
| 418 Nicomedia, decanummium, Year 4 (613/14), 2.65 g              | 426 Countermark of Heraclonas, Heraclius Constantine or Constans II on a follis of Heraclius of Year 20 |
| 419 Cyzicus, follis, Class 1, Year 1 (610/11), 10.56 g           | 427 Cypriote countermark of Constantine IV on one of his own half folles                                |
| 420 Cyzicus, half follis, Class 1, Year 1 (610/11), 5.24 g       | 425 private collection; 427 BM  |

## Plate 25 Secondary eastern mints: AE, 610–45

All coins are of Heraclius save nos 440 and 441, which are of Heraclonas and Heraclius Constantine respectively, and no. 435, which was struck during the Persian occupation of Egypt.

- |   |  |
|---|--|
| 428 Seleucia, follis, Year 7 (616/17), 11.86 g            | 439 Alexandria, dodecanummium, Class 5b (632/41), 9.99 g |
| 429 Seleucia, follis, Year 7 (616/17), 9.20 g             | 440 Alexandria, dodecanummium (641), 9.72 g              |
| 430 Seleucia, half follis, Year 7 (616/17), 4.92 g        | 441 Alexandria, dodecanummium (641/2 or 645/6), 8.89 g   |
| 431 Isaura, follis, Year 8 (617/18), 11.87 g              | 442 Alexandria, hexanummium, Class 2 (628/9?), 3.63 g    |
| 432 Cyprus, follis, Year 17 (626/7), 4.04 g               | 443 Alexandria, hexanummium, Class 3 (629/41), 7.37 g    |
| 433 Cyprus, follis, Year 17 (626/7), 4.68 g               | 444 Alexandria, hexanummium, Class 1 (618/28), 2.03 g    |
| 434 Alexandria, dodecanummium, Class 1a (613/18), 4.28 g  | 445 Alexandria, trianummium, Class 1 (618/29), 2.61 g    |
| 435 Alexandria, dodecanummium, Class 2a (618/28), 18.26 g | 428, 445 BN; 430, 431 BM                                 |
| 436 Alexandria, dodecanummium, Class 3 (628/9), 4.63 g    |  |
| 437 Alexandria, dodecanummium, Class 4 (629/31), 5.46 g   |  |
| 438 Alexandria, dodecanummium, Class 5a (632/41), 9.24 g  |  |

## Plate 26 Carthage and Sardinia: 610–711

All are Carthage save nos 458–60, which are Sardinia. Nos 446–62 are AV, 463–8 are AR, and 469–77 are AE. Dating, where present, is by indictions.

- |   |   |
|---|---|
| 446 Heraclius (610–41), solidus, Class I, Indiction 14 (610/11), 4.47 g           | 460 Justinian II, restored (705–11), solidus, 3.70 g      |
| 447 Heraclius, solidus, Class II, Indiction 1 (612/13), 4.46 g                    | 461 Heraclius, semissis, Indiction 6 (616/17), 2.20 g     |
| 448 Heraclius, solidus, Class II, Indiction 4 (615/16), 4.47 g                    | 462 Constans II, semissis, 2.12 g                         |
| 449 Constans II (641–68), solidus, Class Ib, Indiction not clear (647/51), 4.34 g | 463 Constans II, tremissis, 1.03 g                        |
| 450 Constans II, solidus, Class IIa, indiction not clear (647/51), 4.42 g         | 464 Heraclius, AR, Class III, 0.68 g                      |
| 451 Constans II, solidus, Class III, Indiction 13 (654/5), 4.38 g                 | 465 Constans II, AR, Class Ib (641/7), 0.51 g             |
| 452 Constans II, solidus, Class IVa, Indiction 13 (654/5), 4.31 g                 | 466 Constans II, AR, Class II (647), 0.65 g               |
| 453 Constans II, solidus, Class VI (659/68), 4.35 g                               | 467 Constans II, AR, Class III (659/68), 0.49 g           |
| 454 Constantine IV (668–85), solidus, Class II (674/c. 675), 4.29 g               | 468 Constantine IV, AR, 0.52 g                            |
| 455 Constantine IV, solidus, Class III, Indiction 7 (678/9), 4.31 g               | 469 Heraclius, half follis, Class I, 4.12 g               |
| 456 Constantine IV, solidus, Class IV, Indiction 9 (680/1), 4.40 g                | 470 Heraclius, half follis, Class 2, 4.76 g               |
| 457 Justinian II (685–95), solidus, Indiction 9 (695/6), 4.41 g                   | 471 Heraclius, decanummium, 3.11 g                        |
| 458 Justinian II, solidus, Class I (692/3?), 4.30 g                               | 472 Heraclius, half follis, Indiction 8 (619/20), 4.07 g  |
| 459 Tiberius III (695–705), solidus, 4.29 g                                       | 473 Constans II, follis, Class 1 (641/3), 9.20 g          |
|   | 474 Constans II, half follis, Class 1 (641/3), 7.92 g     |
|   | 475 Constans II, follis, Class 2 (643/7)                  |
|   | 476 Constans II, half follis, Class 2 (643/7), 6.56 g     |
|   | 477 Constans II, decanummium, Class 2 (643/7), 2.27 g     |
|   | 449, 451, 461, 463, 472, 474, 477 BN; 462 BM; 475 R. 1567 |

## Plate 27 Carthage and Sardinia: AE, 610–98

### CARTHAGE

- |  |  |
|--|--|
| 478 Constans II (641–68), half follis, Class 4a (647/59), 4.49 g | 483 Constantine IV, follis, Class 2 (674–81), 11.68 g              |
| 479 Constans II, follis, Class 5 (659/68), 7.74 g                | 484 Constantine IV, follis, Class 3 (681/5)                        |
| 480 Constans II, half follis, Class 5 (659/68), 4.30 g           | 485 Constantine IV, half follis, Class 2 (681/5), 4.33 g           |
| 481 Constantine IV (668–85), follis, Class 1 (668/73), 5.57 g    | 486 Justinian II (685–95), follis, Class 1, Year 2 (686/7), 3.34 g |
| 482 Constantine IV, half follis, Class 1 (673/81), 2.98 g        | 487 Justinian II, follis, Class 2, 5.82 g                          |
|  | 488 Justinian II, follis, Class 3, 3.42 g                          |
|  | 489 Justinian II, follis, Class 4, 5.92 g                          |
|  | 490 Justinian II, follis, Class 7, 3.72 g                          |

## SARDINIA

- |  |   |
|--|---|
| 491 Justinian II, follis, Class 1, 11.20 g     | 494 Justinian II, restored (705–11)?, half follis, 5.41 g |
| 492 Justinian II, half follis, Class 2, 2.77 g |   |
| 493 Leontius (695–8), half follis, 3.41 g      | 481, 486 BN; 482, 483, 494 BM; 484 R. 1674                |

## Plate 28 Sicily (Syracuse): gold coinage, 641–717

From no. 502 onwards many of the solidi have been clipped, which explains their low weights and irregularities in shape.

- |  |   |
|--|---|
| 495 Constans II (641–68), solidus, Class IIc (647/50), 4.38 g  | 504 Justinian II, solidus, Var. (a), 4.21 g           |
| 496 Constans II, solidus, Class III (651/4), 4.41 g            | 505 Leontius (695–8), solidus, Var. (b), 4.15 g       |
| 497 Constans II, solidus, Class IVa (654/9), 4.35 g            | 506 Tiberius III (698–705), solidus, Var. (a), 4.09 g |
| 498 Constans II, solidus, Class IVc (654/9), 4.43 g            | 507 Tiberius III, solidus, Var. (c), 3.91 g           |
| 499 Constans II, solidus, Class V (659/c. 661), 4.35 g         | 508 Philippicus (711–13), solidus, Var. (a), 3.95 g   |
| 500 Constantine IV (668–85), solidus, Class I (668/73), 4.23 g | 509 Theodosius III (715–17), solidus, 4.02 g          |
| 501 Constantine IV, solidus, Class III (674/81), 4.23 g        | 510 Constans II, semissis, Var. (a), 2.18 g           |
| 502 Constantine IV, solidus, Class IV (681/5), 4.24 g          | 511 Constans II, tremissis, Var. (e), 1.46 g          |
| 503 Justinian II (685–95), solidus, Var. (d), 4.05 g           | 512 Constans II, tremissis, Var. (j), 1.33 g          |
|  | 513 Constantine IV, tremissis, 1.35 g                 |
|  | 514 Justinian II, semissis, Var. (b), 1.56 g          |
|  | 515 Justinian II, tremissis, Var. (e), 1.02 g         |
|  | 516 Tiberius III, semissis, Var. (c), 1.61 g          |
|  | 501, 507, 515 BN; 510, 516 BM                         |

## Plate 29 Sicily: AE, 610–68

## HERACLIUS (610–41)

## CONSTANS II (641–68)

- |  |   |
|--|---|
| 517 Catania, decanummium, Class 2, Year 9 (618/19), 2.94 g                 | 523 Constantinople, for Sicily, follis, Year 3 (643/4), 4.57 g    |
| 518 Catania, decanummium, Class 2, Year 11 (620/1), 3.27 g                 | 524 Syracuse, follis, Class 1 (644/7), 3.98 g                     |
| 519 Catania, decanummium, Class 3, Year 16 (625/6), 3.15 g                 | 525 Syracuse, follis, Class 2 (647), 4.70 g                       |
| 520 Sicilian monogram, Class 1 (c. 620), on Justinian, 15.34 g             | 526 Syracuse, follis, Class 3 (650/1), 5.58 g                     |
| 521 Sicilian monogram, Class 2 (631), on Heraclius, Year 21, 14.53 g       | 527 Syracuse, follis, Class 4, Indiction 11 (652/3), 5.37 g       |
| 522 Sicilian monogram, Class 3 (632/41), on similar coin, cut down, 5.80 g | 528 Syracuse, follis, Class 5 (654/9), 5.65 g                     |
|  | 529 Syracuse, follis, Class 6 (659/68), 4.49 g                    |
|  | 530 Syracuse, half follis, Class 2, [Indiction] 7 (648/9), 3.39 g |
|  | 531 Syracuse, half follis, Class 3, [Indiction] 10                |

- (651/2), 3.57 g  
 532 Syracuse, decanummium, Class 3, [Indiction] 10 (651/2), 4.04 g  
 525, 529, 531, 532 BN; 530 Yale University collection

### Plate 30 Sicily: AE, 668–717

Except for no. 538, a half follis, the coins are all folles and were minted at Syracuse.

- |   |   |
|---|---|
| 533 Constantine IV (668–85), Class 1 (668/74), 5.16 g     | 542 Justinian II, Class 11, Indiction 8 (694/5), 4.03 g |
| 534 Constantine IV, Class 2 (674/81), 3.35 g              | 543 Justinian II, Class 12, 3.43 g                      |
| 535 Constantine IV, Class 3 (674/81), 6.25 g              | 544 Leontius (695–8), Class 2, 3.39 g                   |
| 536 Constantine IV, Class 4 (681/5), 4.15 g               | 545 Tiberius III (698–705), Class 1, 3.76 g             |
| 537 Constantine IV, Class 5 (681/5), 5.88 g               | 546 Tiberius III, Class 2, 5.25 g                       |
| 538 Constantine IV, half follis, Class 3 (674/81), 2.80 g | 547 Anastasius II (713–15), Class 2, 4.55 g             |
| 539 Justinian II (685–95, 705–11), Class 1, 3.18 g        | 548 Theodosius III (715–17), Class 1, 2.35 g            |
| 540 Justinian II, Class 6, 6.57 g                         | 538 ANS; 547 Wh.  |
| 541 Justinian II, Class 9, 5.13 g                         |   |

### Plate 31 Italy: gold coinage, 610–85

Nos 549–57 are customarily ascribed to Ravenna, but no. 557 is more likely to be a coin of Rome and some of the others may be so also. The mints of the others are best left undecided.

- |  |   |
|--|---|
| 549 Heraclius (610–41), solidus, Class II (610/13), 4.48 g | 562 Constantine IV, tremissis, 1.39 g   |
| 550 Heraclius, solidus, Class III (613/29), 4.53 g         | 563 Constantine IV, tremissis, 1.40 g   |
| 551 Heraclius, solidus, Class IV (629/32), 4.43 g          | 564 Constantine IV, tremissis, 1.43 g   |
| 552 Heraclius, solidus, Class Vb (638/41), 4.41 g          | 565 Constantine IV, tremissis, 1.35 g   |
| 553 Heraclius, tremissis, Class I (610/11), 1.49 g         | 566 Constantine IV, tremissis, 1.47 g   |
| 554 Heraclonas (641)?, tremissis, 1.38 g                   | 567 Constantine IV, tremissis, 1.45 g   |
| 555 Heraclius Constantine (641), solidus                   | 568 Constantine IV, tremissis, 1.48 g   |
| 556 Heraclonas, solidus, 4.44 g                            |   |
| 557 Constans II (641–68), solidus, 4.39 g                  | 549, 552, 558, 560, 562, 563, 567 BN; 566, 568 BM; 555 Santamaria sale (15 March 1952), lot 1512 (Signorelli collection); 559 Numismatik Lanz (Munich), Auction 14 (18 March 1978), lot 497 |
| 558 Constans II, solidus, 4.34 g                           |   |
| 559 Mezezius (usurper 668–9), solidus, 4.49 g              |   |
| 560 Constantine IV (668–85), solidus, 4.37 g               |   |
| 561 Constantine IV, solidus, 4.32 g                        |   |



### Plate 32 Italy: gold coinage, 685–717

Different denominations are often linked by style and privy marks, but mint attributions are uncertain. Nos 569–74 are probably coins of Ravenna, nos 575–80 and 587 of Rome, and 581–6 and 588 of Naples.

- |  |  |
|--|--|
| 569 Justinian II (685–95), solidus, 4.41 g           | 581 Justinian II, solidus, 4.15 g  |
| 570 Justinian II, tremissis, 1.46 g                  | 582 Leontius, tremissis, 1.43 g  |
| 571 Leontius (695–8), solidus, 4.19 g                | 583 Tiberius III, tremissis, 1.28 g  |
| 572 Leontius, tremissis, 1.46 g                      | 584 Justinian II, restored, tremissis, 1.37 g  |
| 573 Tiberius III (698–705), solidus, 4.34 g          | 585 Anastasius II, tremissis, 1.25 g   |
| 574 Tiberius III, tremissis, 1.37 g                  | 586 Anastasius II, solidus, 4.17 g   |
| 575 Justinian II, solidus, 4.43 g                    | 587 Theodosius III (715–17), solidus, weight not known                                       |
| 576 Justinian II, tremissis, 1.47 g                  | 588 Theodosius III, solidus, 4.13 g  |
| 577 Justinian II, restored (705–11), solidus, 4.18 g |  |
| 578 Anastasius II (713–15), solidus, 4.02 g          | 570, 572 Wh.; 571, 575–9, 581–6, 588 BM; 587 Glendining sale, lot 226 (Rashleigh collection) |
| 579 Anastasius II, solidus, 4.02 g                   |  |
| 580 Anastasius II, tremissis, 1.43 g                 |  |

### Plate 33 Italy: AE, 610–717

#### RAVENNA

#### ROME

- |   |  |
|---|--|
| 589 Heraclius (610–41), follis, Class 1 (610/13), 7.26 g                      | 600 Heraclius, half follis, Class 1 (613/c.620), 3.10 g              |
| 590 Heraclius, follis, Class 3, Year 7 (616/17), 8.80 g                       | 601 Heraclius, half follis, Class 2, Year 15 (624/5), 2.76 g         |
| 591 Heraclius, follis, Class 4, Year 7 (616/17), 7.15 g                       | 602 Heraclius, half follis, Class 3 (629/41), 3.84 g                 |
| 592 Heraclius, follis, Class 5, Year 21 (630/1), 6.15 g                       | 603 Heraclius, decanummium, 1.28 g                                   |
| 593 Heraclius, follis, Class 6a, Year 24 (633/4), 7.12 g                      | 604 Constans II, half follis, Class 2a (646/50), 3.41 g              |
| 594 Constantine IV (668–85), follis, Class I, date illegible, 3.66 g          | 605 Constans II, half follis, Class 3 (650/4), 2.56 g                |
| 595 Tiberius II (698–705), follis, 4.72 g                                     | 606 Constans II, half follis, Class 4 (659/68), 3.21 g               |
| 596 Justinian II, restored (705–11), follis, Class 1, Year 21 (705/6), 2.20 g | 607 Constantine IV, half follis, Class 1 (668/73), 3.31 g            |
| 597 Heraclius, half follis, Class 2 (615/16?), 4.24 g                         | 608 Constantine IV, half follis, Class 2a (674/85), 2.14 g           |
| 598 Heraclius, half follis, Class 5, Year 20 (629/30), 4.18 g                 | 609 Constantine IV, half follis, Class 2b (674/85), 2.47 g           |
| 599 Constans II (641–68), half follis, Class 1, Year 4 (644/5), 3.74 g        | 610 Justinian II (685–95), 30-nummus piece (billon), 1.54 g          |
|   | 611 Leontius (695–8), 30-nummus piece (billon), 0.97 g               |
|   | 589 FW; 599 Copenhagen (Thomsen 346); 603 Leningrad (T., Phocas 126) |

### Plate 34 Arab-Byzantine coinage

Nos 612–14 may have been struck during the Persian occupation of Syria and Palestine, thus antedating the main Arab-Byzantine issues. Unless the contrary is indicated, the coins are in the British Museum.

- |   |  |
|---|--|
| 612 No mint (copy of Justin II of Nicomedia),<br>fels, 8.73 g           | 624 Damascus(?), solidus, AH 77 (= 696/7),<br>4.41 g                         |
| 613 Beth-Shan, fels, 10.91 g  | 625 North Africa, solidus, <i>c.</i> 700, 4.32 g                             |
| 614 Beth-Shan, half fels, 6.20 g  | 626 North Africa, half solidus, <i>c.</i> 700, 2.08 g                        |
| 615 Beth-Shan(?), fels with name of 'Abd al-<br>Malik (685–705), 8.31 g | 627 North Africa, third dinar, <i>c.</i> 710, 1.35 g                         |
| 616 Tiberias, fels, 4.96 g  | 628 Spain, half dinar, <i>c.</i> 713, 1.90 g                                 |
| 617 Emesa, fels, 4.56 g   | 629 North Africa, fels, with name of al-Nu 'mān<br>(AH 80 = 699/700), 2.48 g |
| 618 No mint, fels weight not known                                      | 630 Jerusalem, fels, <i>c.</i> 690, 3.04 g                                   |
| 619 Damascus, fels, 3.29 g  | 631 Qinnasrin, fels, <i>c.</i> 690, 3.08 g                                   |
| 620 Damascus, fels, 3.69 g  | 612 FW; 614, 628 BN; 615, 618 Amman Museum;<br>621 R. 1456; 623 ANS          |
| 621 Baalbek, fels, weight not known                                     |  |
| 622 No mint, pseudo-imperial solidus, 4.46 g                            |  |
| 623 Damascus(?), solidus, <i>c.</i> 692, 4.36 g                         |  |

### Plate 35 Constantinople: solidi, 717–820

- |   |   |
|---|---|
| 632 Leo III (717–41), Class Ia (717/20), 4.37 g           | 642 Constantine VI, Class II (792/7), 4.45 g                            |
| 633 Leo III, Class IIb (720– <i>c.</i> 725), 4.43 g       | 643 Irene (797–802), 4.46 g   |
| 634 Leo III, Class IIIb ( <i>c.</i> 737/41), 4.45 g       | 644 Nicephorus I (802–11), Class I (802/3),<br>4.43 g                   |
| 635 Artavasdus (742–3), Class I (742), 4.43 g             | 645 Nicephorus I, Class II (803/11), 4.45 g                             |
| 636 Artavasdus, Class II (742/3), 4.45 g                  | 646 Michael I (811–13), 4.44 g  |
| 637 Constantine V (741–75), Class Ia (741/51),<br>4.40 g  | 647 Leo V (813–20), Class I (813), 4.45 g                               |
| 638 Constantine V, Class IIb (751/75), 4.38 g             | 648 Leo V, Class IIa (813/20), 4.43 g                                   |
| 639 Leo IV (775–80), Class Ib (776/8), 4.39 g             | 632, 634, 638, 640, 641, 643, 648 Wh.; 635 ANS;<br>647 Leningrad (T. 1) |
| 640 Leo IV, Class II (778/80), 4.35 g                     |   |
| 641 Constantine VI (780–97), Class Ia (780/90),<br>4.41 g |   |

### Plate 36 Constantinople: fractional gold and miliaresia, 717–820

#### GOLD COINS

- |   |   |
|---|---|
| 649 Leo III (717–41), semissis, Class I (717/20),<br>2.17 g       | 652 Leo III, tremissis, Class I (717/20), 1.45 g                      |
| 650 Leo III, semissis, Class IIb (720/ <i>c.</i> 725),<br>2.18 g  | 653 Leo III, tremissis, Class IIb (720/ <i>c.</i> 725),<br>1.46 g     |
| 651 Leo III, semissis, Class IIIa (732/ <i>c.</i> 737),<br>2.06 g | 654 Leo III, tremissis, Class IIIb ( <i>c.</i> 737/741),<br>1.33 g    |
|   | 655 Leo III, half tremissis, Class II (720/ <i>c.</i> 725),<br>0.71 g |

- 656 Artavasdus (742–3), semmissis, Class I (742), 2.20 g  
 657 Nicephorus I (802–11), tremissis, 1.5 g

## SILVER COINS

- 658 Leo III, ceremonial AR (717/20), 3.04 g  
 659 Leo III, miliaresion, 2.20 g  
 660 Leo III, one-third miliaresion, 0.85 g  
 661 Artavasdus, miliaresion, 1.81 g  
 662 Constantine V (741–75), miliaresion (over-

- struck on dirhem), 2.16 g  
 663 Leo IV (775–80), miliaresion, 1.93 g  
 664 Constantine VI (780–97), miliaresion, Var. (b), 2.11 g  
 665 Michael I (811–13), miliaresion, 2.01 g  
 666 Leo V (813–20), miliaresion, Class I, 2.19 g  
 667 Leo V, miliaresion, Class II, 2.02 g  
 649, 651, 656, 666 Wh.; 655 Münzen und Medaillen A.G. Basel, Auction 13 (17 June 1954), lot 846; 657 Leningrad (T. 4).

## Plate 37 Constantinople: copper coinage, 717–c. 745

## LEO III (717–41)

- 668 Follis, Class I (717/20), 7.49 g  
 669 Half follis, Class 1 (717/20), 2.40 g  
 670 Decanummium, Class 1 (717/20)  
 671 Follis, Class 1 bis (718), 2.82 g  
 672 Follis, Class 2a (720/c. 721), 9.96 g  
 673 Follis, Class 2b (c. 721/c. 725), 4.18 g  
 674 Follis, Class 2c (c. 725/c. 732), 2.89 g  
 675 Half follis, Class 2a (720/c. 721), 5.98 g  
 676 Half follis, Class 2b (c. 721/c. 725), 2.28 g  
 677 Decanummium, Class 2a (720/c. 721), 2.20 g  
 678 Follis, Class 3 (732?), 3.64 g

- 679 Half follis, Class 3 (732?)  
 680 Follis, Class 4a (732/c. 735), 6.20 g  
 681 Follis, Class 4a (732/c. 735), 0.86 g  
 682 Follis, Class 4b (c. 735/741), 3.83 g  
 683 Half follis, Class 4b (c. 735/741), 1.97 g

## CONSTANTINE V (741–75)

- 684 Follis, Class 1, 3.44 g  
 685 Half follis, Class 1, 1.70 g  
 686 Decanummium, Class 1, 1.22 g  
 670, 679 Athens, Agora; 678 Wh.

## Plate 38 Constantinople: copper coinage, c. 745–820

- 687 Constantine V (741–75), half follis, Class 2 (?/751), 0.96 g  
 688 Constantine V, pentanummium, Class 2 (?/751), 0.66 g  
 689 Constantine V, follis, Class 3 (751/769?), 1.66 g  
 690 Constantine V, half follis, Class 3 (751/769?), 0.93 g  
 691 Constantine V, follis, Class 4 (769?/775), 3.18 g  
 692 Constantine V, half follis, Class 4 (769?/775), 1.02 g  
 693 Leo IV (775–80), follis, Class 1 (776/8), 4.23 g  
 694 Leo IV, half follis, Class 1 (776/8), 2.24 g  
 695 Leo IV, follis, Class 2 (778/80), 5.41 g  
 696 Constantine VI (780–97), follis, Class 1a (780/90), 2.86 g  
 697 Constantine VI, follis, Class 2 (792/7), 2.77 g  
 698 Irene (797–802), follis, 6.95 g  
 699 Nicephorus I (802–11), follis, Class 1 (802/3), 6.64 g  
 700 Nicephorus I, follis, Class 2 (803/11), 4.19 g  
 701 Leo V (813–20), follis, Class 1 (813), 5.07 g  
 702 Leo V, follis, Class 2a, (813/20), 5.26 g  
 690, 693, 694, 695, 697, 700 Wh.

## Plate 39 Italian mints, 717–81

The coins are of base gold unless otherwise described.

### RAVENNA

- 703 Leo III (717–41), tremissis, Class I (717/20), 1.48 g  
 704 Leo III, tremissis, Class II (720/41), 1.31 g  
 705 Constantine V (741–75), tremissis, Class I, Indiction 14 (745/6), 1.33 g  
 706 Constantine V, tremissis, Class II, Indiction 15 (746/7), 1.32 g

### ROME

- 707 Leo III, solidus, Class Ia (717/20), weight not known  
 708 Leo III, solidus, Class Ib (717/20), 4.26 g  
 709 Leo III, solidus, Class Iii (721/41), 3.36 g  
 710 Artavasdus (742–3), solidus, Class II, 4.06 g  
 711 Constantine V, solidus, Class I (741/51), 4.05 g  
 712 Constantine V, solidus, Class Iia (751/75), 2.84 g  
 713 Constantine V, solidus, Class Iih (751/75), 3.91 g (AE)

- 714 Leo IV (775–80), solidus, 4.25 g  
 715 Leo III, tremissis, Var. a (720/c. 721), 1.44 g  
 716 Leo III, tremissis, Var. b (c. 721/41), 1.45 g  
 717 Leo III, tremissis, Var. k (c. 721/41), 1.29 g  
 718 Constantine V, tremissis, Class I (741/51), 1.32 g  
 719 Constantine V, tremissis, Class Iib (751/75), 1.25 g  
 720 Constantine V, tremissis, Class Iif (751/75), 1.46 g  
 721 Leo IV, tremissis, 1.30 g (plated AE)  
 722 Leo III, AR (with monogram of Pope Gregory II or III), 0.32 g  
 723 Leo III, 30-nummus piece (billon), 0.49 g  
 724 Constantine V, AR, 0.40 g

### UNCERTAIN MINT

- 725 Constantine V, AR, 0.44 g  
 703–4, 708, 714–15, 719, 724, BM; 707 private collection, Italy; 710 BN; 721 Wh.

## Plate 40 Naples and Sicily: gold coins, 717–820

### NAPLES

- 726 Leo III (717–41), solidus, Class I (717/20), 4.00 g  
 727 Leo III, tremissis, Class I (717/20), 1.25 g  
 728 Leo III, solidus, Class II (717/20), 3.84 g  
 729 Leo III, tremissis, Class II (717/20), 1.34 g  
 730 Leo III, solidus, Class III (720/41), 4.00 g  
 731 Nicephorus I (802–11), solidus, 4.11 g (mint uncertain)

### SICILY (SYRACUSE)

- 732 Leo III, solidus, Class I (717/20), 4.05 g  
 733 Leo III, solidus, Class II (717/20), 3.96 g  
 734 Leo III, solidus, Class IIIa (c. 735/41), 3.93 g

- 735 Constantine V (741–75), solidus, Var. a, 3.91 g  
 736 Constantine V, solidus, Var. d, 3.68 g  
 737 Irene (797–802), solidus, Class I, 3.89 g  
 738 Nicephorus I, solidus, Class II, 3.80 g  
 739 Michael I (811–13), solidus, Class II, 3.85 g  
 740 Leo V (813–20), solidus, Class I, 3.89 g  
 741 Leo III, semissis, Class II (720/c. 735), 2.05 g  
 742 Constantine V, semissis, 1.86 g  
 743 Michael I, semissis, Class I (811), 1.82 g  
 744 Leo V, semissis, Class I, 1.81 g  
 745 Leo III, tremissis, Class Iib (c. 735/41), 1.26 g  
 746 Constantine V, tremissis, 1.24 g  
 726, 741 Leningrad (T. 28, 96); 727–9, 732, 739, 744–5 BM; 735, 742 Wh.

### Plate 41 Sicily: copper coins, 717–820

The coins are all folles with the exception of no. 753.

- |   |  |
|---|--|
| 747 Leo III (717–41), Class I (717/20), 2.88 g      | 756 Nicephorus I, Class 3, 2.14 g                                  |
| 748 Leo III, Class 2 (720), 3.56 g                  | 757 Michael I (811–13), Class 1 (811), 1.79 g                      |
| 749 Leo III, Class 3 (721/c. 730), 6.00 g           | 758 Michael I, Class 2 (811/13), 1.86 g                            |
| 750 Leo III, Class 4 (c. 731/41), 3.11 g            | 759 Leo V (813–20), Class 1, 2.24 g                                |
| 751 Constantine V (741–75), Class 1 (751/?), 3.67 g | 760 Leo V, Class 2, 3.25 g   |
| 752 Constantine V, Class 2 (?/775), 2.59 g          | 761 Leo V, Class 3, 3.05 g   |
| 753 Constantine V, 3/4 follis (751/75), 1.70 g      | 762 Leo V, Class 4a, 3.91 g  |
| 754 Leo IV (775–80), 2.47 g                         | 748 Spahr collection; 749 private collection; 752, 756, 759–61 Wh. |
| 755 Nicephorus I (802–11), Class 2, 6.26 g          |  |

### Plate 42 Constantinople: solidi, 820–912

- |  |  |
|--|--|
| 763 Michael II (820–9), Class I (821), 4.43 g      | 772 Michael III, Class III (856/67), 4.41 g    |
| 764 Michael II, Class II (821/9), 4.44 g           | 773 Basil I (867–86), Class I (868), 4.38 g    |
| 765 Theophilus (829–42), Class I (829/30), 4.41 g  | 774 Basil I, Class II (868/79), 4.46 g         |
| 766 Theophilus, Class II (830/1), 4.40 g           | 775 Basil I, Class III (882?), 4.41 g          |
| 767 Theophilus, Class IIId (831/40), 4.37 g        | 776 Leo VI (886–912), Class Ib (906/8), 4.25 g |
| 768 Theophilus, Class IV (late 830s), 4.41 g       | 777 Leo VI, Class II (908/12), 4.36 g          |
| 769 Theophilus, Class V (840/2), 4.45 g            | 765, 770–1, 776 Wh.                            |
| 770 Michael III (842–67), Class Ia (842/3), 4.49 g |  |
| 771 Michael III, Class II (843/56), 4.36 g         |  |

### Plate 43 Constantinople: solidi, 912–76

- |   |  |
|---|--|
| 778 Alexander (912–13), 4.48 g                          | 786 Constantine VII, Class XIII (945), 4.47 g  |
| 779 Constantine VII (913–59), Class II (914/19), 4.42 g | 787 Constantine VII, Class XIV (945), 4.37 g   |
| 780 Constantine VII, Class III (920/1), 4.40 g          | 788 Constantine VII, Class XV (945/59), 4.36 g |
| 781 Romanus I (920–44), Class IV (921), 4.39 g          | 789 Romanus II (959–63), Class I, 4.41 g       |
| 782 Romanus I, Class VI (921), 4.38 g                   | 790 Nicephorus II (963–9), Class I, 4.41 g     |
| 783 Romanus I, Class VII (921/31), 4.45 g               | 791 Nicephorus II, Class IV, 4.38 g            |
| 784 Romanus I, Class VIII (c. 930), 4.57 g              | 792 John I (969–76), tetarteron, 4.10 g        |
| 785 Constantine VII, Class X (931/44), 4.41 g           | 782–4, 786, 788 Wh.                            |

### Plate 44 Constantinople: miliaresia (AR), 820–976

- |   |  |
|---|--|
| 793 Michael II (820–9), 2.11 g                          | 797 Michael III (842–67), Class III (866?/7), 2.12 g |
| 794 Theophilus (829–42), Class III (831/c. 838), 3.22 g | 798 Basil I (867–86), 2.73 g                         |
| 795 Theophilus, Class IV (c. 838/40), 2.08 g            | 799 Leo VI (886–912), Class II (908/12), 2.87 g      |
| 796 Theophilus, Class V (840/2), 2.03 g                 | 800 Alexander (912–13), 3.04 g                       |

- |  |  |
|--|--|
| 801 Constantine VII (913–59), Class I (914/21), 2.98 g | 804 Romanus I, Class V (931), 2.95 g           |
| 802 Romanus I (920–44), Class III (921/31), 2.92 g     | 805 Constantine VII, Class VI (945–59), 2.82 g |
| 803 Romanus I, Class IV (931), 8.51 g (AE pattern)     | 806 Nicephorus II (963–9), 2.48 g              |
|  | 807 John I (969–76), 3.20 g                    |
|  | 794, 800 Wh.; 803 Leningrad                    |

### Plate 45 Constantinople: copper, 820–86

The coins are all folles with the exception of no. 811.

- |  |  |
|--|--|
| 808 Michael II (820–9), Class 2, 4.72 g                | 813 Basil I (867–86), Class 1a (868/9), 5.07 g |
| 809 Michael II, Class 3, 7.02 g                        | 814 Basil I, Class 2d (869/70), 6.20 g         |
| 810 Theophilus (829–42), Class 2a (831/42), 5.87 g     | 815 Basil I, Class 3c (870/9), 5.94 g          |
| 811 Theophilus, half follis, Var. (b) (831/42), 5.07 g | 816 Basil I, Class 4 (870/9), 9.23 g           |
| 812 Michael III (842–67), 7.16 g                       | 817 Basil I, Class 5 (879/86), 9.75 g          |
|  | 810, 816 Wh.                                   |

### Plate 46 Constantinople: folles, 886–969

- |  |  |
|--|--|
| 818 Leo VI (886–912), Class 1, 8.98 g                  | 6.77 g   |
| 819 Leo VI, Class 2, 8.39 g                            | 824 Romanus I (920–44), Class 4 (931/44), 5.39 g |
| 820 Leo VI, Class 3, 7.42 g                            | 825 Constantine VII, Class 5 (945/c.950), 9.33 g |
| 821 Constantine VII (913–59), Class 1 (914/19), 6.18 g | 826 Constantine VII, Class 6 (c.950/9), 5.26 g   |
| 822 Constantine VII, Class 2 (920/31), 5.49 g          | 827 Nicephorus II (963–9), Class 1, 10.71 g      |
| 823 Christopher (920–31), Class 3 (920/31),            | 818, 820 Wh.; 823 former Balvin collection       |

### Plate 47 Sicily: 820–78

Nos 845–7 are of base gold, no. 848 of gilded copper.

#### GOLD COINS

##### *Michael II (820–9)*

- 828 Solidus, Class I (821), 3.80 g  
 829 Solidus, Class II, 3.84 g  
 830 Solidus, Class III, 3.82 g  
 831 Solidus, Class IV, 3.89 g  
 832 Solidus, Class IV, 3.71 g  
 833 Semissis, Class III, 1.90 g  
 834 Semissis, Class IV, 1.77 g  
 835 Tremissis, Class III, 1.28 g

##### *Theophilus (829–42)*

- 836 Solidus, Class I (829/c.830), 3.85 g  
 837 Semissis, Class I (829/c.830), 1.85 g  
 838 Semissis, Class I (829/c.830), 1.78 g  
 839 Tremissis, Class I (829/c.830), 1.09 g  
 840 Solidus, Class II (c.830/1), 3.9 g  
 841 Semissis, Class II (c.830/1), 1.77 g  
 842 Solidus, Class III (831/42), 3.88 g  
 843 Solidus, Class III (barbarous), 3.63 g  
 844 Semissis, Class III (831/42), 1.61 g  
 845 Semissis, Class II (831/42), 1.69 g

*Michael III (842–67)*

## FOLLES (AE)

- 846 Semissis, Class I (842/66), 1.66 g  
 847 Semissis, Class III (866/7), 1.36 g

*Basil I (867–86)*

- 848 Semissis (?), 1.06 g

- 849 Michael II, 4.44 g  
 850 Theophilus, Class 1, 4.40 g  
 851 Theophilus, Class 2a, 3.65 g  
 852 Theophilus, Class 3, 3.66 g  
 853 Michael III, 3.19 g  
 828, 840 Leningrad (T. 25, 35); 835, 847 BN; 845,  
 852 Wh.; 850 BM

## Plate 48 Abnormal and provincial issues, 829–912

No. 858 is abnormally light for a semissis, but another specimen, in the BN, weighs 2.20 g.

## NAPLES (?)

- 854 Theophilus (829–42), solidus (base AV),  
 Class I, 4.19 g  
 855 Theophilus, solidus (base AV), Class IIb,  
 4.11 g

## not known

- 861 Basil I, semissis, Class IV, 2.05 g  
 862 Basil I, tremissis, Class IV, 1.46 g  
 863 Basil I, half follis, Var. a, 5.13 g  
 864 Leo VI (886–912), half follis, 3.52 g

## UNCERTAIN PROVINCIAL MINT

- 856 Theophilus, follis, 7.05 g  
 857 Theophilus, follis, 6.17 g

## CHERSON (AE)

## CONSTANTINOPLE

- 858 Theophilus, semissis, Class I (829/30), 1.53 g  
 859 Theophilus, semissis, Class V (840/2), 2.23 g  
 860 Basil I (867–86), tremissis, Class III, weight

- 865 Autonomous (mid-ninth century), weight  
 not known  
 866 Michael III (842–67), 2.22 g  
 867 Basil I, Class 1 (867/7), 1.57 g  
 868 Basil I, Class 2 (868/c. 876), 5.55 g  
 869 Basil I, Class 3 (c. 876/c. 879), 10.48 g  
 854, 856, 867 Wh.; 859 Turin, Museo Civico; 860  
 not traced; 861 BN; 865 Oreshnikov 17

## Plate 49 Cherson continued: copper coinage

- 870 Basil I (867–86), Class 4a (879/86), 4.46 g  
 871 Basil I, Class 4b (879/86), 3.60 g  
 872 Leo VI (886–912), Class 1, 2.95 g  
 873 Leo VI, Class 2, 3.11 g  
 874 Leo VI, Class 3, 3.06 g  
 875 Leo VI, Class 4, 3.33 g  
 876 Alexander (912–13), weight not known  
 877 Constantine VII (913–59), Class 1 (914/19),  
 2.77 g  
 878 Constantine VII, Class 2 (919/20), 3.35 g  
 879 Romanus I (920–44), Class 3 (920), 2.90 g  
 880 Romanus I, Class 4 (921), weight not known  
 881 Romanus I, Class 5a (921/44), 8.20 g

- 882 Romanus I, Class 6 (921/44), 8.38 g  
 883 Romanus I, Class 7 (921/44), 4.78 g  
 884 Romanus I, Class 8 (921/44), 2.44 g  
 885 Constantine VII (913–59), Class 9 (945),  
 2.35 g  
 886 Constantine VII, Class 10 (945/59), 3.86 g  
 887 Romanus II (959–63), 2.82 g  
 888 Nicephorus II (963–9), 3.17 g  
 889 John I (969–76), 3.75 g  
 890 Basil II (976–1025), 976/89, 2.52 g  
 875 Wh.; 876, 880 Oreshnikov 31, 42

### Plate 50 Basil II (976–1025): histamena

All AV save no. 898, which is a pattern in silver.

- |  |  |
|--|--|
| 891 Class I (977/89?), weight not known        | 902 Class IIIg (989?/1001?), 4.34 g              |
| 892 Class IIa (977/89?), 4.43 g                | 903 Class IVd (1001?/1005?), 4.37 g              |
| 893 Class IId (977/89?), weight not known      | 904 Class V (1005?), 4.41 g                      |
| 894 Class IIe (977/89?), 4.39 g                | 905 Class VIa (1005/25), 4.39 g                  |
| 895 Class IIg (977/89?), 4.41 g                |  |
| 896 Class IIh (977/89?), 4.38 g                | 891 Montagu sale (24 April 1896), lot 1235; 892, |
| 897 Class IIj (977/89?), 4.45 g                | 895–6, 902–5 Wh.; 893 Glendining sale (7         |
| 898 Pattern histamenon (989?), 4.06 g          | March 1957), lot 644; 900 Rashleigh sale I       |
| 899 Class IIIb (989?/1001?), 4.42 g            | (Glendining, 14 January 1953), lot 261; 901      |
| 900 Class IIIbb (989?/1001?), weight not known | Bourgey sale (1 December 1966), lot 62           |
| 901 Class IIIc (989?/1001?), weight not known  |  |

### Plate 51 Histamena (AV), 1025–57

- |  |   |
|--|---|
| 906 Constantine VIII (1025–8), 4.41 g          | 914 Constantine IX, Class III, 4.34 g           |
| 907 Romanus III (1028–34), Var. (a), 4.42 g    | 915 Constantine IX, Class IVa, 4.40 g           |
| 908 Michael IV (1034–41), Var. (c), 4.44 g     | 916 Theodora (1055–6), Var. (a), 4.46 g         |
| 909 Michael IV, Thessalonica, 4.37 g           | 917 Michael VI (1056–7), Var. (a), 4.42 g       |
| 910 Zoe (1041), copper pattern, 17.79 g        |   |
| 911 Zoe and Theodora (1041–2), 4.41 g          | 908, 914, 917 Wh.; 910 Istanbul, Archaeological |
| 912 Constantine IX (1042–55), Class Ia, 4.42 g | Museum  |
| 913 Constantine IX, Class IIa, 4.38 g          |   |

### Plate 52 Histamena, 1057–81

The coins are of progressively baser gold.

- |   |   |
|---|---|
| 918 Isaac I (1057–9), Class I, 4.39 g         | 925 Michael VII (1071–8), Class I, 4.44 g     |
| 919 Isaac I, Class II, 4.37 g                 | 926 Michael VII, Class IId, 4.39 g            |
| 920 Constantine X (1059–67), Class Ia, 4.33 g | 927 Nicephorus III (1078–81), Class I, 4.34 g |
| 921 Constantine X, Class II, 4.41 g           | 928 Nicephorus III, Class II, 4.08 g          |
| 922 Eudocia (1067), 4.41 g                    | 929 Nicephorus III, Class IIIb, 4.29 g        |
| 923 Romanus IV (1068–71), Class I, 4.42 g     |   |
| 924 Romanus IV, Class II, 4.40 g              | 919–21, 924, 926, 929 Wh.                     |

### Plate 53 Tetartera, c. 980–1081

From no. 938 onwards the coins are of decreasingly fine gold.

- |  |  |
|--|--|
| 930 Basil II (976–1025), Type A (977?), 4.06 g | known                                    |
| 931 Basil II, Type D (989/1001?), weight not   | 932 Basil II, Type E (c. 1000/5), 4.24 g |



- |  |   |
|--|---|
| 933 Basil II, Type F(i) (c. 1000/25), 4.08 g   | 944 Romanus IV (1068–71), 4.01 g              |
| 934 Basil II, Type T(ii) (c. 1000/25), 4.20 g  | 945 Michael VII (1071–8), Class I, 4.07 g     |
| 935 Constantine VIII (1025–8), Class I, 4.09 g | 946 Michael VII, Class II, 4.04 g             |
| 936 Constantine VIII, Class II, 4.07 g         | 947 Michael VII, Class IIIb, 3.96 g           |
| 937 Romanus III (1028–34), 4.09 g              | 948 Nicephorus III (1078–81), Class I, 3.93 g |
| 938 Constantine IX (1042–55), Class Ia, 4.04 g | 949 Nicephorus III, Class IIb, 4.03 g         |
| 939 Constantine IX, Class II, 4.04 g           |   |
| 940 Theodora (1055–6), 3.87 g                  | 931 R. 1943; 933 Münzen und Medaillen A.G.    |
| 941 Isaac I (1057–9), 3.94 g                   | Basel, Auction 25 (17 November 1962), lot     |
| 942 Constantine X (1059–67), Var. (a), 3.99 g  | 716; 943 BM; 944–5, 949 Wh.                   |
| 943 Eudocia (1067), 4.00 g                     |   |

### Plate 54 Silver coinage, 976–1067

- |   |   |
|---|---|
| 950 Basil II (976–1025), miliaresion, Class I (977), 2.17 g                         | 957 Constantine IX, 2/3 miliaresion, Var. (a), 2.07 g         |
| 951 Basil II, miliaresion, Class IIA (977/89), 2.53 g                               | 958 Theodora (1055–6), 2/3 miliaresion, 1.41 g                |
| 952 Basil II, miliaresion, Class IIB (977/89), 2.95 g                               | 959 Michael VI (1056–7), 2/3 miliaresion, 1.65 g              |
| 953 Basil II, miliaresion, Class III (989), 2.83 g                                  | 960 Isaac I (1057–9), 2/3 miliaresion, 1.38 g                 |
| 954 Basil II, miliaresion, Class IV (989/1025), 2.54 g                              | 961 Constantine X (1059–67), 2/3 miliaresion, Class I, 1.54 g |
| 955 Romanus III (1028–34), miliaresion, 2.17 g                                      | 962 Constantine X, 2/3 miliaresion, Class IIe, 1.42 g         |
| 956 Constantine IX (1042–55), miliaresion, Var. (a) (concave, large module), 2.83 g | 963 Constantine X, miliaresion, 2.53 g                        |
|   | 951, 954, 956 Wh.; 960 BN                                     |

### Plate 55 Silver coinage, 1059–81

- |  |  |
|--|--|
| 964 Constantine X (1059–67), 1/3 miliaresion, Var. (a), weight not known | 973 Michael VII, 2/3 miliaresion, Class III, 0.90 g          |
| 965 Constantine X, 1/3 miliaresion, Var. (b), 0.77 g                     | 974 Michael VII, 2/3 miliaresion, Class IVa, 1.45 g          |
| 966 Romanus IV (1068–71), 2/3 miliaresion, Class I, weight not known     | 975 Michael VII, 1/3 miliaresion, Class II, 0.53 g           |
| 967 Romanus IV, 2/3 miliaresion, Class IIb, 1.43 g                       | 976 Nicephorus III (1078–81), miliaresion, Class I, 1.48 g   |
| 968 Romanus IV, 1/3 miliaresion, 0.83 g                                  | 977 Nicephorus III, miliaresion, Class IIa (concave), 1.80 g |
| 969 Michael VII (1071–8), miliaresion, Class Ib, 2.13 g                  | 978 Nicephorus III, 2/3 miliaresion, 0.88 g                  |
| 970 Michael VII, miliaresion, Class IIa (concave), 2.06 g                | 979 Nicephorus Melissenus (1080–1), 2/3 miliaresion, 1.34 g  |
| 971 Michael VII, 2/3 miliaresion, Class I, 1.45 g                        |  |
| 972 Michael VII, 2/3 miliaresion, Class II, 1.25 g                       | 964 private collection; 966 R. 2029; 973 former              |
|  | Longuet collection; 979 BN (presumably                       |
|  | minted at Nicaea, not Constantinople)                        |

### Plate 56 Anonymous Folles, Classes A-F

- |  |  |
|--|--|
| 980 Class A1 (overstruck on follis of Nicephorus II), 8.54 g | 986 Class C, 9.03 g  |
| 981 Class A2, Var. 1 (heaviest class), 24.58 g               | 987 Class D, 8.29 g  |
| 982 Class A2, Var. 39 (light class), 10.08 g                 | 988 Class E, 5.90 g  |
| 983 Class A2, Var. 47 (medium class), 11.65 g                | 989 Class F (overstruck on Class E and overstruck by Class G), 11.07 g |
| 984 Class B, 14.62 g   | 980 Wh.  |
| 985 Class B (imitation), 6.73 g                              |  |

### Plate 57 Anonymous Folles (Classes G-K) and signed folles, 1059–81

- |  |  |
|--|--|
| 990 Class G, 7.00 g  | 997 Romanus IV (1068–71), 7.17 g                               |
| 991 Class H (overstruck on Constantine X, Class 1), 7.34 g | 998 Michael VII (1071–8), Var. b, 3.64 g                       |
| 992 Class I, 5.86 g  | 999 Nicephorus III (1071–81), 7.98 g                           |
| 993 Class J, 6.99 g  | 1000 Nicephorus Basilacius or Bryennius (1077–8), 9.33 g       |
| 994 Class K, 4.63 g  | 1001 Nicephorus Basilacius or Bryennius (another type), 7.04 g |
| 995 Constantine X (1059–67), Class 1, 9.16 g               |  |
| 996 Constantine X, Class 2, 11.65 g                        |  |

### Plate 58 Folles of Trebizond (eleventh-twelfth centuries)

The numbering of the types is that of Bendall.

- |                     |   |
|---------------------|---|
| 1002 Type 1, 4.38 g | 1011 Type 10, 2.91 g                            |
| 1003 Type 2, 4.91 g | 1012 Type 11, 5.14 g                            |
| 1004 Type 3, 3.89 g | 1013 Type 12, 3.64 g                            |
| 1005 Type 4, 6.02 g | 1014 Type 13a, 1.15 g                           |
| 1006 Type 5, 2.79 g | 1015 Type 13b, 2.43 g                           |
| 1007 Type 6, 6.90 g | 1002–3, 1005, 1008, 1011–15 private collection; |
| 1008 Type 7, 4.77 g | 1004, 1007, 1010 Corinth excavations            |
| 1009 Type 8, 3.87 g |   |
| 1010 Type 9, 2.01 g |   |

### Plate 59 Alexius I (1081–1118) (1)

#### PRE-REFORM COINAGE, 1081–92

#### *Constantinople*

- |  |  |
|--|--|
| 1016 Histamenon (E1), transitional issue, weight not known | 1019 Tetarteron (AR), Class I, 3.92 g                  |
| 1017 Histamenon (E1), Class I, 4.30 g                      | 1020 Tetarteron (AR), Class II, 3.78 g                 |
| 1018 Histamenon (E1), Class II, 4.39 g                     | 1021 Miliaresion (AR), 1.89 g (worn)                   |
|  | 1022 2/3 miliaresion (AR), 2.07 g                      |
|  | 1023 1/3 miliaresion (AR), 0.97 g                      |
|  | 1024 Follis (overstruck on Anon. Class K) (AE), 7.55 g |

*Thessalonica*

- 1025 Histamenon (E1), Class I, 3.43 g  
 1026 Histamenon (AR), Class II, 3.64 g  
 1027 Tetarteron (AR), Class I, 3.77 g  
 1028 Tetarteron (AR), Class II, 3.79 g  
 1029 2/3 miliaresion (AR), 1.06 g (corroded)

*Unidentified mint in Asia Minor*

- 1030 Follis (AE), 6.42 g  
 1016 Berlin; 1022, 1029 BM

## Plate 60 Alexius I (1081–1118) (2)

## THE REFORM COINAGE OF 1092

*Constantinople*

- 1031 Electrum trachy, 4.34 g  
 1032 Billon trachy, 3.39 g  
 1033 Lead half tetarteron, 4.59 g

*Thessalonica*

- 1034 Billon trachy, 3.11 g  
 1035 Lead half tetarteron, 5.02 g

## POST-REFORM COINAGE, 1092–1118

*Constantinople*

- 1036 Hyperpyron (AV), Var. IA(i), 4.23 g  
 1037 Hyperpyron (AV), Var. IA(iii), 4.41 g  
 1038 Hyperpyron (AV), Var. II, 4.37 g  
 1039 Electrum trachy, 4.50 g  
 1040 Billon trachy, Class 1, 3.87 g  
 1041 Billon trachy, Class 1, 3.83 g  
 1032, 1040 O

## Plate 61 Alexius I (1081–1118) (3)

Where Hendy's 1969 references have been changed in *DOC* 4, the former ones are given in parentheses.

## CONSTANTINOPLE

- 1042 Tetarteron (AE), Class B(A), 4.69 g  
 1043 Tetarteron (AE), Class C(B), 3.01 g  
 1044 Tetarteron (AE), Class D(C), 3.91 g  
 1045 Tetarteron (AE), Class E(D), 3.83 g  
 1046 Half tetarteron (Pb), 7.06 g  
 1047 Half tetarteron (AE), 2.15 g

## THESSALONICA

- 1048 Hyperpyron (AV), Var. I, 4.36 g

- 1049 Hyperpyron (AV), Var. V, 4.33 g  
 1050 Hyperpyron (AV), Var. VI, 4.38 g  
 1051 Electrum trachy, 4.34 g  
 1052 Billon trachy, Type B, 3.62 g  
 1053 Billon trachy, Type C, 3.85 g  
 1054 Billon trachy, Type D, weight not known  
 1044, 1045, 1048 Wh.; 1052 O; 1053 Birmingham, Barber Institute of Fine Arts; 1054 private collection

## Plate 62 Alexius I (1081–1118) and John II (1118–43)

Class references in parentheses are those of Hendy.

### ALEXIUS I

#### *Thessalonica*

- 1055 Tetarteron (AE), Class 2 (1), 4.03 g
- 1056 Tetarteron (AE), Class 3 (2), 4.02 g
- 1057 Tetarteron (AE), Class 4 (3), 3.36 g
- 1058 Tetarteron (AE), Class 5 (–), weight not known
- 1059 Tetarteron (AE), Class – (E), 2.44 g

#### *Uncertain mints*

- 1060 Philippopolis (?), hyperpyron (AV), 4.28 g
- 1061 Philippopolis (?), billon trachy, 3.89 g

- 1062 Hyperpyron (AV), rev. only, weight not known

- 1063 Tetarteron (AE), 2.87 g

### JOHN II

#### *Constantinople*

- 1064 Hyperpyron (AV), Class I, 4.02 g
- 1065 Hyperpyron (AV), Class II, 4.40 g
- 1066 Hyperpyron (AV), Class IIIb, 4.43 g
- 1058 Istanbul, Archaeological Museum; 1059 BM; 1061 Birmingham, Barber Institute of Fine Arts; 1062 Plovdiv Museum (Gornoslav hoard); 1065 Wh.

## Plate 63 John II (1118–43) continued

#### *Constantinople*

- 1067 Electrum trachy, Var. I(B), 4.45 g
- 1068 Electrum trachy, Var. II(B), 4.39 g
- 1069 Billon trachy, Class 1, 3.59 g
- 1070 Billon trachy, Class 2(A), 3.27 g
- 1071 Tetarteron (AE), Type A, 3.33 g
- 1072 Tetarteron (AE), Type B, 3.30 g

#### *Thessalonica*

- 1073 Hyperpyron (AV), Class I, 4.49 g
- 1074 Electrum trachy, 4.13 g
- 1075 Billon trachy, 3.27 g
- 1076 Tetarteron (AE), 2.62 g
- 1077 Half tetarteron (AE), Type A, 1.74 g
- 1078 Half tetarteron (AE), Type B, 1.51 g
- 1073 Wh.; 1075 BN

## Plate 64 Manuel I (1143–80) (1)

### CONSTANTINOPLE

- 1079 Hyperpyron (AV), Var. I, 3.91 g
- 1080 Hyperpyron (AV), Var. IV, 4.34 g
- 1081 Electrum trachy, Class I(A), 4.33 g
- 1082 Electrum trachy, Class II(B), 4.32 g
- 1083 Electrum trachy, Type C(A), var., 4.47 g

- 1084 Electrum trachy, Type C(A), 4.56 g
- 1085 Electrum trachy, Type D(B), 4.47 g
- 1086 Electrum trachy, Type E(A), 4.24 g
- 1087 Billon trachy, Class 1(A), 2.87 g
- 1088 Billon trachy, Class 2(B), 3.19 g
- 1080, 1083–6 Wh.

## Plate 65 Manuel I (1143–80) (2)

### CONSTANTINOPLE

- 1089 Billon trachy, Class 3, Phase I(A), 4.78 g
- 1090 Billon trachy, Class 3, Phase II(B), 4.89 g
- 1091 Billon trachy, Class 4(A), 4.58 g

- 1092 Billon trachy, Class 4(C), 5.85 g
- 1093 Tetarteron (AE), Class 1, 4.04 g
- 1094 Tetarteron (AE), Type B, 3.42 g
- 1095 Tetarteron (AE), Type C, 4.01 g
- 1096 Tetarteron (AE), Type D, 4.87 g

## THESSALONICA

- 1097 Hyperpyron (AV), 4.43 g  
1098 Electrum trachy, Class 1, 2.64 g

- 1099 Electrum trachy, Class 2, 3.59 g  
1100 Electrum trachy, Type C, 3.98 g  
1097 Hess sale (5 April 1955), lot 245

## Plate 66 Manuel I (1143–80) and Andronicus I (1183–5)

## MANUEL I

*Thessalonica*

- 1101 Tetarteron (AE), Type A, 4.03 g  
1102 Tetarteron (AE), Type B, 2.94 g  
1103 Half tetarteron (AE), Type A, 2.94 g  
1104 Half tetarteron (AE), Type B, 2.86 g

*Uncertain Greek mint*

- 1105 Half tetarteron (AE), Type A, 1.49 g  
1106 Half tetarteron (AE), Type B, 2.26 g  
1107 Half tetarteron (AE), Type C, 1.99 g  
1108 Half tetarteron (AE), Type D, 1.85 g

## ANDRONICUS I

*Constantinople*

- 1109 Hyperpyron (AV), 4.16 g  
1110 Electrum trachy, Var. A, 4.20 g  
1111 Billon trachy, Var. B, 5.58 g  
1112 Tetarteron (AE), 4.29 g

*Thessalonica*

- 1113 Tetarteron (AE), Type A, 4.49 g  
1114 Tetarteron (AE), Type B, 2.55 g

*Uncertain Greek mint*

- 1115 Half tetarteron (AE), 1.38 g  
1109–12 Wh.; 1114 BM (W. 19)

## Plate 67 Isaac of Cyprus (1184–91) and Theodore Mankaphas (1188–9)

The references in parentheses are those of Hendy. As explained in the text, the mint attributions seem to me doubtful.

## ISAAC DUCAS COMNENUS (CYPRUS)

- 1116 Electrum trachy, 3.56 g  
1117 Billon trachy, Type A, 3.69 g  
1118 Billon trachy, Type B, 4.42 g  
1119 Billon trachy, secondary mint, 3.87 g  
1120 Billon trachy, uncertain Isaac, 4.63 g  
1121 Tetarteron (AE), Type A, 2.48 g  
1122 Tetarteron (AE), Type B, 3.13 g  
1123 Tetarteron (AE), –  
1124 Tetarteron (AE), secondary mint  
1125 Tetarteron (AE), uncertain Isaac, Type A, 2.81 g

## THEODORE MANKAPHAS (PHILADELPHIA)

- 1126 Silver trachy (for electrum)  
1127 Billon trachy  
1116, 1122 O; 1119 ANS; 1120, 1126 Birmingham, Barber Institute of Fine Arts; 1123 private collection, acquired in Cyprus; 1124 Curium excavations (Cox 731); 1127 Aphrodisias excavations

## Plate 68 Isaac II (1185–95) and Alexius III (1195–1203)

### ISAAC II

#### *Constantinople*

- 1128 Hyperpyron (AV), Var. B, 4.56 g
- 1129 Electrum trachy, Var. B, 4.04 g
- 1130 Billon trachy, Var. A(a), 4.51 g
- 1131 Tetarteron (AE), 3.28 g

#### *Thessalonica*

- 1132 Tetarteron (AE), 3.61 g

### ALEXIUS III

#### *Constantinople*

- 1133 Hyperpyron (AV), Var. I, 4.43 g
- 1134 Hyperpyron (AV), Var. II, 4.35 g

- 1135 Electrum trachy, Var. II, 3.39 g

- 1136 Billon trachy, Var. IIB, 3.47 g

- 1137 Tetarteron (AE), 2.73 g

#### *Thessalonica*

- 1138 Tetarteron (AE), 3.57 g

- 1139 Half tetarteron (AE), Type 1, 1.47 g

- 1140 Half tetarteron (AE), Type 2, 2.38 g

#### 'NEATLY CLIPPED TRACHEA'

- 1141 Manuel I, Constantinople, Type 1, 2.04 g

- 1142 Andronicus I, Constantinople, Var. B, 1.24 g

- 1143 Alexius III, Constantinople, Var. IA, 1.86 g

- 1128, 1137 BN; 1129 Wh.

## Plate 69 The Empire of Nicaea (1)

The mint is Magnesia unless otherwise stated.

### THEODORE I (1204–22)

- 1144 Silver trachy, Type II, 4.35 g
- 1145 Silver trachy, Type IIIa, 4.23 g
- 1146 Copper trachy (Nicaea), Type 1, 3.29 g
- 1147 Copper trachy (Nicaea), Type 2, 2.86 g
- 1148 Copper trachy, Type A, 4.18 g
- 1149 Copper trachy, Type B, 3.97 g

### ANONYMOUS TETARTERA

- 1152 Type A, 2.53 g

- 1153 Type C, 2.30 g

- 1154 Type D, 2.31 g

- 1155 Type E, 2.03 g

- 1156 Type G, 2.06 g

- 1144, 1145, 1149 Wh.; 1148 Sardis no. 974

### ANONYMOUS TRACHEA WITH CHRIST CHALKITES

- 1150 Silver trachy, 1.85 g (chipped)

- 1151 Copper trachy, 3.05 g

### Plate 70 The Empire of Nicaea (2)

JOHN III VATATZES (1222–54), AV, AR

- 1157 Hyperpyron (AV), Class I, 4.28 g
- 1158 Hyperpyron (AV), Class II, 3.90 g
- 1159 Silver trachy, Class A, 2.69 g
- 1160 Silver trachy, Class B, 3.28 g
- 1161 Silver trachy, Class D, 2.57 g
- 1162 Silver trachy, Class E, 2.67 g

- 1163 Silver trachy, Class G, 2.71 g
- 1164 Silver trachy, Class H, 2.68 g
- 1165 Silver trachy, Class I, 2.89 g
- 1166 Silver trachy, Class M, 2.84 g
- 1157, 1161, 1162 Wh.; 1159, 1160 BM; 1165 Hess-Bank Leu sale (16 April 1964), lot 473; 1166 Bank Leu sale (4 May 1976), lot 545

### Plate 71 The Empire of Nicaea (3)

JOHN III VATATZES (CONTINUED), AE

- 1167 Trachy, Class C, 3.36 g
- 1168 Trachy, Class D, 1.73 g (broken)
- 1169 Trachy, Class E, 4.46 g
- 1170 Trachy, Class F, 3.69 g
- 1171 Trachy, Class G, 1.80 g (chipped)
- 1172 Trachy, Class H, 3.61 g
- 1173 Trachy, Class J, 3.26 g

- 1174 Trachy, Class K, 3.96 g
- 1175 Tetarteron, Class A, 2.15 g
- 1176 Tetarteron, Class B, 3.41 g
- 1177 Tetarteron, Class C, 2.68 g
- 1178 Tetarteron, Class D, 2.34 g
- 1179 Tetarteron, Class E, 1.66 g
- 1180 Half tetarteron, 1.69 g
- 1169 Wh.; 1172 BM

### Plate 72 The Empire of Nicaea (4)

THEODORE II (1254–8)

- 1181 Hyperpyron (AV), Var. B, 4.30 g
- 1182 Hyperpyron (AV), Var. C, 4.19 g
- 1183 Silver trachy, Type I (B), 2.54 g
- 1184 Silver trachy, Type II (C), 2.73 g
- 1185 Silver trachy, Type III (A), 2.76 g
- 1186 Silver trachy, Type IV (–), 2.77 g

- 1187 Copper trachy, Type A, 3.09 g
- 1188 Copper trachy, Type B, 1.28 g
- 1189 Copper trachy, Type C, 4.34 g
- 1190 Copper trachy, Type D, 2.79 g
- 1191 Tetarteron (AE), Type A, 2.20 g
- 1192 Tetarteron (AE), Type B, 1.43 g
- 1181 BM; 1183 Wh.; 1187, 1191, 1192 BN

### Plate 73 Thessalonica (1)

THEODORE COMNENUS DUCAS (1224–30)

- 1193 Silver trachy, Type A, 1.87 g
- 1194 Silver trachy, Type B, 2.48 g
- 1195 Silver trachy, Type C, 3.27 g
- 1196 Copper trachy, Type A, 3.74 g
- 1197 Copper trachy, Type B, 3.30 g
- 1198 Copper trachy, Type C, 3.27 g

- 1199 Copper trachy, Type D, 4.62 g
- 1200 Copper trachy, Type E, 2.39 g
- 1201 Tetarteron (AE), 3.98 g
- 1202 Half tetarteron (AE), Type A, 1.35 g
- 1203 Half tetarteron (AE), Type B, 1.47 g
- 1204 Half tetarteron (AE), Type C, 2.07 g
- 1195 Birmingham, Barber Institute of Fine Arts

## Plate 74 Thessalonica (2)

## MANUEL COMNENUS DUCAS (1230–7)

- 1205 Silver trachy, Type A, 1.87 g
- 1206 Copper trachy, Type A, 2.19 g
- 1207 Copper trachy, Type C, 2.26 g
- 1208 Copper trachy, Type E, weight not known
- 1209 Copper trachy, Type F, 1.77 g
- 1210 Copper trachy, Type G, 3.81 g

## JOHN DUCAS COMNENUS (1237–44)

- 1211 Copper trachy, Series I, Type A, 1.49 g (broken)
- 1212 Copper trachy, Series I, Type B, 2.59 g
- 1213 Copper trachy, Series I, Type C, 2.49 g
- 1214 Copper trachy, Series I, Type D, 1.81 g
- 1208 Corinth excavations

## Plate 75 Thessalonica (3): copper trachea

## JOHN DUCAS COMNENUS (CONTINUED)

- 1215 Series I, Type E, 1.86 g
- 1216 Series II, Type A(F), 2.26 g
- 1217 Series II, Type B(G), 1.69 g
- 1218 Series II, Type C(H), 2.01 g
- 1219 Series II, Type D(I), 2.05 g
- 1220 Series III, Type A, 1.24 g
- 1221 Series III, Type D(A), 1.24 g
- 1222 Series III, Type F, 1.07 g
- 1223 Series III, Type L, 1.02 g

- 1224 Series III, Type M, 1.46 g
- 1225 Series III, Type P, 0.53 g
- 1226 Series III, Type Q, 1.12 g
- 1227 Series III, Type R, 1.49 g
- 1228 Series III, Type S, weight not known

## UNCERTAIN ATTRIBUTION

- 1229 1.31 g
- 1228 Sofia, Archaeological Museum (Oustovo hoard)

## Plate 76 Thessalonica (4): copper trachea

## JOHN III VATATZES (1246–54)

- 1230 Type A, 2.45 g
- 1231 Type B, 4.19 g
- 1232 Type C, 1.79 g
- 1233 Type D, 1.57 g
- 1234 Type E, 2.98 g
- 1235 Type F, 2.61 g
- 1236 Type G, 3.01 g

- 1237 Type H, 2.58 g
- 1238 Type I, 2.38 g
- 1239 Type J, 2.48 g
- 1240 Type K, 2.14 g

## THEODORE II (1254–8)

- 1241 2.86 g



### Plate 77 Latin imitative coinages (1)

No. 1244 was turned over in the striking, so the obverse type (Virgin seated) is largely obscured by a repetition of the reverse type.

#### CONSTANTINOPLE: COPPER TRACHEA, LARGER MODULE

1242 Type A, 3.55 g  
1243 Type B, 4.16 g  
1244 Type C, 2.38 g  
1245 Type D, 3.93 g

1246 Type E, 3.43 g  
1247 Type F, 2.72 g  
1248 Type G, 3.21 g  
1249 Type H, 2.94 g  
1250 Type J, 3.32 g  
1251 Type K, 3.32 g

### Plate 78 Latin imitative coinages (2)

#### CONSTANTINOPLE: COPPER TRACHEA, LARGER MODULE, CONTINUED

1252 Type L, 1.99 g  
1253 Type M, 2.92 g  
1254 Type N, 4.03 g  
1255 Type O, 3.60 g  
1256 Type P, 3.79 g  
1257 Type Q, 5.22 g

1258 Type R, 3.60 g  
1259 Type S, 3.88 g  
1260 Type T, 3.76 g

#### ISAAC II, RESTORED (1203)

1261 Tetarteron (AE), 3.76 g  
1259 Wh.

### Plate 79 Latin imitative coinages (3)

#### THESSALONICA

1262 Copper trachy, larger module, Type A, 2.83 g  
1263 Copper trachy, larger module, Type B, 1.92 g  
1264 Copper trachy, larger module, Type C, 3.04 g  
1265 Tetarteron (AE), Type A, 1.85 g  
1266 Tetarteron (AE), Type B, 1.54 g

1268 Type B, 0.97 g  
1269 Type C, 1.63 g  
1270 Type D, 1.20 g  
1271 Type E, 1.59 g  
1272 Type F, 1.30 g  
1273 Type G, 1.68 g

#### BULGARIAN IMITATIVE TRACHEA

1274 Type A, 2.71 g  
1275 Type B, 2.77 g  
1276 Type C, 2.43 g

#### UNCERTAIN MINTS: COPPER TRACHEA, SMALLER MODULE

1267 Type A, 2.26 g

### Plate 80 Miscellaneous derivative coinages

#### EPIRUS

1277 Michael I (1204–12/13), electrum trachy  
1278 Michael II (1231–68), copper trachy

#### SERBIA

1279 Stephen Radoslav (c.1228–33), copper trachy, 2.91 g  
1280 Stephen Radoslav, copper trachy

## BULGARIA

- 1281 John Asen II (1218–41), copper trachy, 2.50 g

## TREBIZOND

- 1282 Andronicus I (1222–35), copper trachy, 3.66 g  
1283 Andronicus I, copper trachy, 4.33 g

## RHODES

- 1284 Leo Gabalas (1204–40), uncertain denomination, AE  
1285 John Gabalas (1240–9), uncertain denomination, AE  
1277, 1278, 1280, 1284, 1285 whereabouts not traced; 1279 Leningrad

## Plate 81 Palaeologid gold coinage

No. 1286 was struck at Magnesia, the others at Constantinople. Except for no. 1297 they are all hyperpyra.

- |  |   |
|--|---|
| 1286 Michael VIII (1259–82), 4.12 g                              | 1294 Andronicus II and Andronicus III (1325–8 and later), Class III, 3.90 g |
| 1287 Michael VIII, Class I, 4.21 g                               | 1295 John V and Anna of Savoy (1341–7), 4.34 g                              |
| 1288 Michael VIII, Class IIa, 3.22 g                             | 1296 John V and John VI (1347–53), 5.20 g                                   |
| 1289 Michael VIII, Class IIb, 4.10 g                             | 1297 John VI (1353–4), 'florin', 1.88 g                                     |
| 1290 Andronicus II, alone (1282–94), Class Ia, 3.36 g            | 1298 Manuel II (1391–1425), 4.70 g  |
| 1291 Andronicus II, Class Ib, 4.23 g                             | 1286 Bucharest; 1288, 1289 Wh.; 1297 BN; 1298 BM                            |
| 1292 Andronicus II and Michael IX (1294–1320), Class IIa, 4.02 g |   |
| 1293 Andronicus II and Michael IX, Class IIb, 4.06 g             |   |

## Plate 82 Palaeologid silver and billon (1)

Nos 1299 and 1300 were struck at Magnesia, the others at Constantinople.

- |  |  |
|--|--|
| 1299 Michael VIII (1259–82), trachy, Class A, 2.04 g                                 | 1310 Anonymous 'religious' basilicon, Type A, 2.02 g               |
| 1300 Michael VIII, trachy, Class C, 1.66 g   | 1311 Anonymous 'religious' basilicon, Type B, 1.79 g               |
| 1301 Michael VIII, trachy, Class A, 1.62 g   | 1312 Andronicus II and Michael IX, half basilicon, 1.31 g          |
| 1302 Michael VIII, trachy, Class C, 1.93 g   | 1313 Andronicus II, billon tornese, Class B, 0.61 g                |
| 1303 Michael VIII, trachy, Class D, 1.38 g   | 1314 Andronicus II, billon tornese, Class B, 0.61 g                |
| 1304 Andronicus II and Michael IX (1294–1320), basilicon, Class A, 1.92 g            | 1314 Andronicus II, billon tornese, Class D, 0.74 g                |
| 1305 Andronicus II and Michael IX, basilicon, Class B, 1.66 g                        | 1315 Andronicus II and Michael IX, billon tornese, Class F, 0.60 g |
| 1306 Andronicus II and Michael IX, basilicon, Class D, 2.19 g                        | 1305, 1307, 1308, 1310 Wh.; 1309 Bendall collection                |
| 1307 Andronicus II and Michael IX, basilicon, Class E, 1.53 g                        |  |
| 1308 Andronicus II and Andronicus III (1325–8 and later), basilicon, Class H, 1.94 g |  |
| 1309 Andronicus II and Andronicus III, basilicon, Class I, 1.64 g                    |  |

### Plate 83 Palaeologid silver and billon (2)

- |  |   |
|--|---|
| 1316 Andronicus III (1328–41), basilicon, abnormal type, 1.71 g    | 1329 Class B, John V (1341–91), billon, 0.93 g  |
| 1317 Andronicus III, basilicon, Class A, 2.01 g                    | 1330 Class B, John V, AE, 2.10 g  |
| 1318 Andronicus III, basilicon, Class B, 1.35 g                    | 1331 Class E, anonymous, billon   |
| 1319 Andronicus III, basilicon, Class C, 1.28 g                    | 1332 Class F, anonymous, billon, 0.76 g   |
| 1320 Andronicus III, basilicon, Class D, 1.01 g                    | 1333 Class F, anonymous, billon, 0.51 g   |
| 1321 Andronicus III, half basilicon, 0.99 g                        | 1334 Class H, anonymous, billon, 0.70 g   |
| 1322 John V and Andronicus III, basilicon, Class A, 1.08 g         | 1335 Class H, anonymous, billon, 0.34 g (cut half)  |
| 1323 John V and Anna of Savoy (1341–7), basilicon, Class C, 1.25 g | 1336 Class I, anonymous, billon, 0.47 g   |
| 1324 John V and Anna of Savoy, basilicon, Class D, 1.01 g          | 1337 Billon with <i>Romaion Phylax</i> inscription, 0.74 g  |
| 1325 John V and Anna of Savoy, basilicon, Class E, 1.18 g          |   |
| 1326 John V and John VI (1347–53), Class B                         | 1318, 1321, 1329, 1330, 1332, 1334 Wh.; 1324 former Bertelè collection; 1326 Bucharest; 1328 Birmingham, Barber Institute of Fine Arts; 1331 former Fürstenberg collection (A. E. Cahn sale 75, 15 May 1932, lot 1749); 1336 BM |
| 1327 John V and John VI, Class D, 1.09 g                           |   |

#### POLITIKON COINAGE

- 1328 Class A, Andronicus III, billon, 0.54 g (broken)

### Plate 84 Michael VIII (1259–82): copper trachea

#### MAGNESIA

- 1338 Hendy Type A, 2.24 g

#### CONSTANTINOPLE

- 1339 Bendall C1, 2.90 g  
 1340 Bendall C2, 2.17 g  
 1341 Bendall C4, 1.13 g  
 1342 Bendall C6, 1.74 g  
 1343 Bendall C7, 1.74 g

- 1344 Bendall C8, 1.97 g  
 1345 Bendall C9, 1.57 g  
 1346 Bendall C10, 2.16 g  
 1347 Bendall C11, 2.92 g  
 1348 Bendall C12, 2.22 g  
 1349 Bendall C13, 3.11 g  
 1350 Bendall C14, 1.77 g  
 1351 Bendall C15, 1.45 g  
 1352 Bendall C16, 3.08 g

### Plate 85 Michael VIII (1259–82): Constantinopolitan trachea

- |                          |                          |
|--------------------------|--------------------------|
| 1353 Bendall C17, 2.41 g | 1359 Bendall C24, 1.86 g |
| 1354 Bendall C18, 1.59 g | 1360 Bendall C25, 1.65 g |
| 1355 Bendall C20, 2.80 g | 1361 Bendall C26, 1.40 g |
| 1356 Bendall C21, 2.50 g | 1362 Bendall C28, 2.11 g |
| 1357 Bendall C22, 1.82 g | 1363 Bendall UC4, 2.34 g |
| 1358 Bendall C23, 2.96 g | 1364 Bendall –, 1.87 g   |

## MICHAEL VIII AND ANDRONICUS II

- 1365 Type A (Bendall C1), 2.63 g  
1366 Type B, 1.80 g

1367 Type C, 1.57 g

1356 BM (W. 10)

## Plate 86 Michael VIII (1259–82): Thessalonican trachea

- 1368 Bendall T1, 2.05 g  
1369 Bendall T2, 2.41 g  
1370 Bendall T3, 2.21 g  
1371 Bendall T4, 2.04 g  
1372 Bendall T5, 1.44 g  
1373 Bendall T6, 2.15 g  
1374 Bendall T7, 1.59 g  
1375 Bendall T8, 1.31 g

- 1376 Bendall T9, 2.04 g  
1377 Bendall T10, 1.50 g  
1378 Bendall T11, 2.68 g  
1379 Bendall T12, 1.68 g  
1380 Bendall T13, 2.52 g  
1381 Bendall T14, 2.03 g  
1382 Bendall T15, 2.17 g

## Plate 87 Michael VIII (1259–82): Thessalonican trachea; and copper coins attributed to Rhodes

## MICHAEL VIII ALONE

- 1383 Bendall T16, 3.87 g  
1384 Bendall, cf. C8, 2.57 g  
1385 Bendall T17, 2.21 g  
1386 Bendall UT1, 1.85 g  
1387 Bendall UT2, 1.77 g  
1388 Bendall UT3, 1.00 g  
1389 Bendall UT4, 2.67 g

## MICHAEL VIII AND ANDRONICUS II

- 1390 Bendall T1, 2.82 g  
1391 Bendall –, 2.72 g  
1392 Bendall –, 1.39 g

*Rhodes*

- 1393 Uncertain denomination, 2.75 g  
1394 Uncertain denomination, 0.73 g  
1395 Uncertain denomination, 0.85 g  
1396 Uncertain denomination, 1.40 g  
1397 Uncertain denomination, 0.79 g

## Plate 88 Andronicus II: Constantinopolitan trachea

- 1398 Class B, *LPC* 38<sup>8</sup>, 2.37 g  
1399 Class C, *LPC* 40<sup>9</sup>, 1.82 g  
1400 Class D, *LPC* 40<sup>10</sup>, 2.33 g  
1401 Class G, *LPC* 42<sup>13</sup>, 1.24 g  
1402 Class H, *LPC* 44<sup>14</sup>, 1.85 g  
1403 Class J, *LPC* 46<sup>16</sup>, 1.50 g  
1404 Class K, *LPC* 46<sup>17</sup>, 1.36 g  
1405 Class L, *LPC* 48<sup>18</sup>, 2.42 g  
1406 Class M, *LPC* 48<sup>19</sup>, 2.76 g

- 1407 Class O, *LPC* 50<sup>21</sup>, 3.29 g  
1408 Class P, *LPC* 50<sup>22</sup>, 1.90 g  
1409 Class Q, *LPC* 50<sup>23</sup>, 2.24 g  
1410 Class R, *LPC* 52<sup>24</sup>, 2.17 g  
1411 Class S, *LPC* 52<sup>25</sup>, 2.15 g  
1412 Class U, *LPC* 54<sup>27</sup>, 1.35 g  
1402 Bendall collection

## Plate 89 Andronicus II – John VI: Constantinopolitan trachea

### ANDRONICUS II ALONE

- 1413 Class Y, *LPC* 56<sup>31</sup>, 2.34 g  
 1414 Class Z, *LPC* 58<sup>32</sup>, 1.02 g (broken)  
 1415 Class BB, *LPC* 58<sup>35</sup>, 1.64 g

1423 Class M, *LPC* 82<sup>25</sup>, 2.09 g

1424 Class N, *LPC* 82<sup>26</sup>, 1.24 g

### ANDRONICUS II AND ANDRONICUS III (1325–8 and later)

### ANDRONICUS II AND MICHAEL IX (1294–1320)

- 1416 Class B, *LPC* 72<sup>13</sup>, 1.51 g  
 1417 Class C, *LPC* 72<sup>14</sup>, 3.89 g  
 1418 Class F, *LPC* 76<sup>17</sup>, 4.13 g  
 1419 Class H, *LPC* 78<sup>19</sup>, 1.87 g  
 1420 Class J, *LPC* 78<sup>21</sup>, 2.11 g  
 1421 Class K, *LPC* 80<sup>22</sup>, 2.39 g  
 1422 Class L, *LPC* 80<sup>24</sup>, 1.97 g

1425 Class A, *LPC* 110<sup>5</sup>

### ANDRONICUS III (1328–41)

1426 Class A, *LPC* 122<sup>9</sup>, 3.64 g

### JOHN V AND JOHN VI (1347–53)

1427 Class A, *LPC* 146<sup>11</sup>, 2.85 g

## Plate 90 Andronicus II: Thessalonican trachea

- 1428 Class A, *LPC* 204<sup>1</sup>, 1.31 g  
 1429 Class B, *LPC* 204<sup>2</sup>, 1.25 g  
 1430 Class C, *LPC* 206<sup>3</sup>, 0.97 g  
 1431 Class E, *LPC* 54<sup>28</sup>, 2.09 g  
 1432 Class F, *LPC* 208<sup>7</sup>, 0.97 g  
 1433 Class G, *LPC* 208<sup>8</sup>, 3.31 g  
 1434 Class I, *LPC* 210<sup>10</sup>, 2.15 g  
 1435 Class J, *LPC* 210<sup>11</sup>, 1.32 g  
 1436 Class K, *LPC* 212<sup>12</sup>, 2.99 g

- 1437 Class L, *LPC* 212<sup>13</sup>, 1.30 g  
 1438 Class M, *LPC* 212<sup>14</sup>, 1.97 g  
 1439 Class N, *LPC* 214<sup>15</sup>, 2.24 g  
 1440 Class O, *LPC* 214<sup>16</sup>, 1.98 g  
 1441 Class P, *LPC* 214<sup>17</sup>, 2.56 g  
 1442 Class Q, *LPC* 216<sup>18</sup>, 1.23 g  
 1434 Bendall collection

## Plate 91 Andronicus II: Thessalonican trachea continued

- 1443 Class S, *LPC* 216<sup>20</sup>, 0.82 g  
 1444 Class T, *LPC* 218<sup>21</sup>, 1.11 g  
 1445 Class U, *LPC* 218<sup>22</sup>, 1.50 g  
 1446 Class V, *LPC* 218<sup>23</sup>, 1.35 g  
 1447 Class W, *LPC* 220<sup>24</sup>, 3.08 g  
 1448 Class X, *LPC* 220<sup>25</sup>, 1.46 g  
 1449 Class Y, *LPC* 220<sup>26</sup>, 1.54 g  
 1450 Class Z, *LPC* 222<sup>27</sup>, 1.58 g

- 1451 Class AA, *LPC* 222<sup>28</sup>, 1.21 g  
 1452 Class BB, *LPC* 222<sup>29</sup>, 0.88 g  
 1453 Class CC, *LPC* 224<sup>30</sup>, 1.79 g  
 1454 Class EE, *LPC* 224<sup>32</sup>, 0.82 g  
 1455 Class FF, *LPC* 226<sup>33</sup>, 1.67 g  
 1456 Class GG, *LPC* 226<sup>34</sup>, 1.46 g  
 1457 Class II, *LPC* 54<sup>29</sup>, 1.33 g

## Plate 92 Andronicus II – John V: Thessalonican trachea

Concavity on the later coins is only evident where much of the outer border is present, since the die faces themselves were virtually flat.

### ANDRONICUS II

1458 Class JJ, *LPC* Add. 46<sup>7</sup>, 1.20 g

### ANDRONICUS II AND MICHAEL IX (1294–1320)

- 1459 Class A, *LPC* 228<sup>1</sup>
- 1460 Class B, *LPC* 228<sup>2</sup>, 1.76 g
- 1461 Class D, *LPC* 230<sup>4</sup>, 1.71 g
- 1462 Class F, *LPC* 232<sup>6</sup>, 1.41 g
- 1463 Class G, *LPC* 232<sup>7</sup>, 2.42 g
- 1464 Class H, *LPC* 78<sup>20</sup>, 1.21 g
- 1465 Class I, *LPC* 80<sup>23</sup>, 2.19 g

### ANDRONICUS II AND ANDRONICUS III (1325–8 and later)

1466 Class B, *LPC* 230<sup>5</sup>, 1.60 g

### ANDRONICUS III (1328–41)

- 1467 Class D, *LPC* 236<sup>4</sup>, 1.62 g
- 1468 Class E, *LPC* 236<sup>5</sup>, 2.52 g
- 1469 Class F, *LPC* 236<sup>6</sup>, 2.00 g
- 1470 Class I, *LPC* 238<sup>9</sup>, 0.79 g
- 1471 Class K, *LPC* 240<sup>11</sup>, 1.31 g
- 1472 Class R, *LPC* Add. 47<sup>13</sup>
- 1473 Class S

### JOHN V (WITH ANDRONICUS III)

1474 Class A, 1.44 g

## Plate 93 Constantinople: flat AE, Michael VIII and Andronicus II

### MICHAEL VIII (1259–82)

1475 Tetarteron, 2.01 g

### ANDRONICUS II ALONE (1284–94)

1476 Tetarteron, *LPC* 60<sup>36</sup>, 1.94 g

### ANDRONICUS II AND MICHAEL IX (1294–1320): ASSARIA

- 1477 Class A, *LPC* 82<sup>27</sup>, 2.97 g
- 1478 Class B, *LPC* 84<sup>28</sup>, 1.95 g
- 1479 Class C, *LPC* 84<sup>29</sup>, 2.11 g

- 1480 Class D, *LPC* 84<sup>30</sup>, 2.05 g
- 1481 Class E, *LPC* 86<sup>31</sup>, 1.36 g
- 1482 Class F, *LPC* 86<sup>32</sup>, 2.11 g
- 1483 Class G, *LPC* 86<sup>33</sup>, 2.30 g
- 1484 Class H, *LPC* 88<sup>36</sup>, 1.92 g
- 1485 Class I, *LPC* 90<sup>37</sup>, 2.03 g
- 1486 Class J, *LPC* 90<sup>38</sup>, 1.46 g
- 1487 Class K, *LPC* 90<sup>39</sup>, 1.74 g
- 1488 Class M, *LPC* 92<sup>41</sup>, 2.16 g
- 1489 Class N, *LPC* 92<sup>42</sup>, 1.73 g
- 1490 Class P, *LPC* 94<sup>44</sup>, 2.55 g
- 1491 Class Q, *LPC* 94<sup>45</sup>, 2.26 g

## Plate 94    Assaria of Constantinople (Andronicus II–John V) and Thessalonica (John V and Anna)

### CONSTANTINOPLE

#### *Andronicus II and Michael IX (1294–1320)*

- 1492 Class R, *LPC* 96<sup>46</sup>, 1.46 g  
 1493 Class U, *LPC* 98<sup>49</sup>, 1.62 g  
 1494 Class V, *LPC* 98<sup>50</sup>, 2.17 g  
 1495 Class W, *LPC* 98<sup>51</sup>, 1.83 g

#### *Andronicus III (1328–41)*

- 1496 Class A, *LPC* 124<sup>10</sup>, 2.46 g  
 1497 Class B, *LPC* 124<sup>11</sup>, 2.01 g  
 1498 Class C, *LPC* 124<sup>12</sup>, 2.14 g  
 1499 Class D, *LPC* 126<sup>13</sup>, 3.07 g

#### *John V and John VI (1347–53)*

- 1500 Class A, *LPC* 144<sup>9</sup>, 2.14 g  
 1501 Class C, *LPC* 146<sup>12</sup>, 2.54 g  
 1502 Class D, *LPC* Add. 45<sup>6</sup>, 0.68 g

### THESSALONICA

#### *John V and Anna of Savoy (1353–64/5)*

- 1503 *LPC* 246<sup>2</sup> (var.), 2.24 g  
 1504 *LPC* 248<sup>1</sup>, 1.09 g  
 1505 *LPC* 248<sup>2</sup>, 2.03 g  
 1506 *LPC* 248<sup>3</sup>, 1.03 g  
 1507 *LPC* 248<sup>4</sup>, 1.22 g  
 1508 *LPC* 248<sup>6</sup>, 1.69 g  
 1509 *LPC* 252<sup>7</sup>, 1.10 g

1499, 1508 Wh.; 1504–7 Bendall collection

## Plate 95    Period of the stavraton

See also Pl. 81, no. 1298, for the hyperpyron of Manuel II.

### STAVRATA, AR

- 1510 John V (1341–91), 8.34 g  
 1511 Andronicus IV (1376–9), 7.74 g  
 1512 John V, 8.30 g  
 1513 Manuel II (1391–1425), 8.04 g  
 1514 John VIII (1425–48), 7.10 g

### HALF STAVRATA, AR

- 1515 John V, 4.09 g  
 1516 Manuel II, earliest series, 3.48 g (pierced)  
 1517 Manuel II, heavy series, 3.89 g  
 1518 Manuel II, light series, 3.27 g  
 1519 John VIII, 3.16 g

### ONE-EIGHTH STAVRATA, AR

- 1520 John V, 0.93 g  
 1521 John VIII, 0.75 g

### TORNESI, AE

- 1522 Andronicus IV, 2.31 g  
 1523 John V, 1.73 g  
 1524 John V, 3.93 g  
 1525 Andronicus IV (?), 2.47 g

### FOLLARI, AE

- 1526 John V, 0.67 g  
 1527 Manuel II, 0.56 g  
 1510, 1513, 1515, 1519, 1520, 1525 Wh.; 1521  
 former Longuet collection; 1526 BM







Medallic and ceremonial coins, AV, AR, 491-610



Eastern gold coins, 491–610



Western gold and silver coins, 534–c. 623



Anastasius I (491-518), AE



80



81



82



83



84



85



86



87



88











124



125



126



127



128



129



130



131



135



132



133



134



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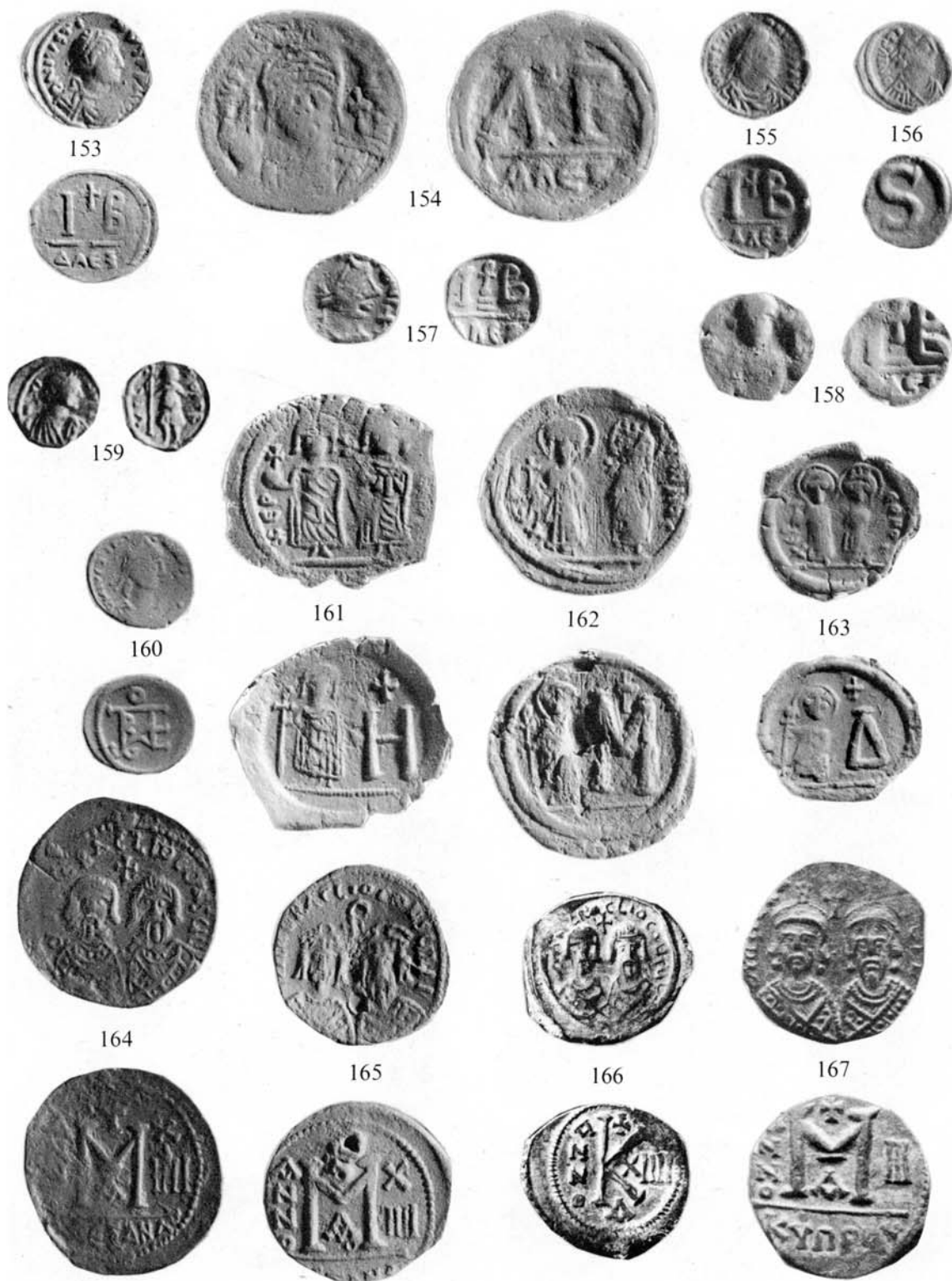


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Alexandria and minor eastern mints: AE, 518-610











Anomalous AE of the sixth century



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Plate 16



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Unusual AV and AR, 610-717





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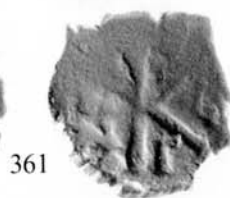
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Secondary eastern mints: AE, 610–c. 670





Secondary eastern mints: AE, 610-45







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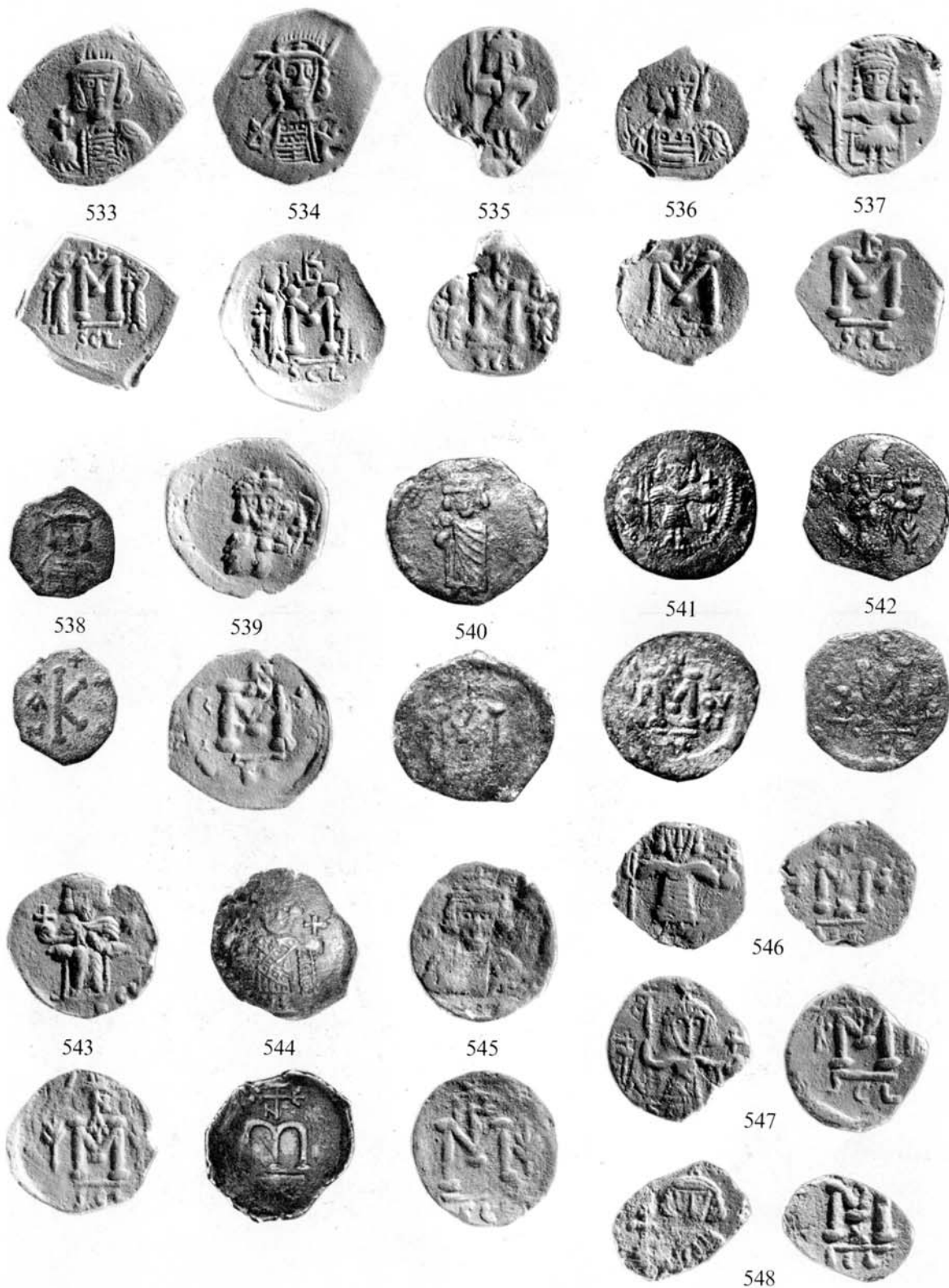


516













Italy: gold coinage, 685-717







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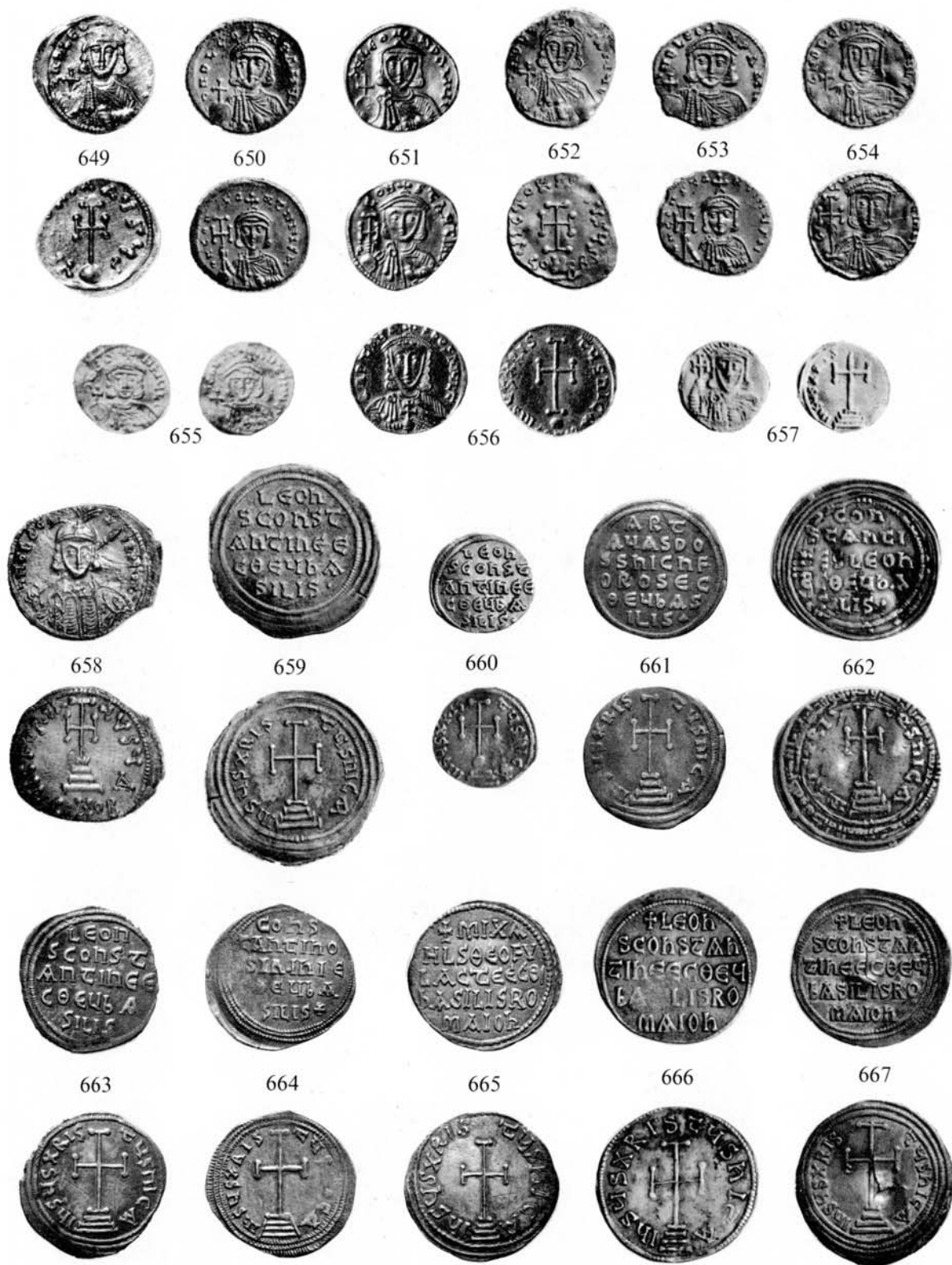


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Constantinople: fractional gold and miliaresia, 717-820

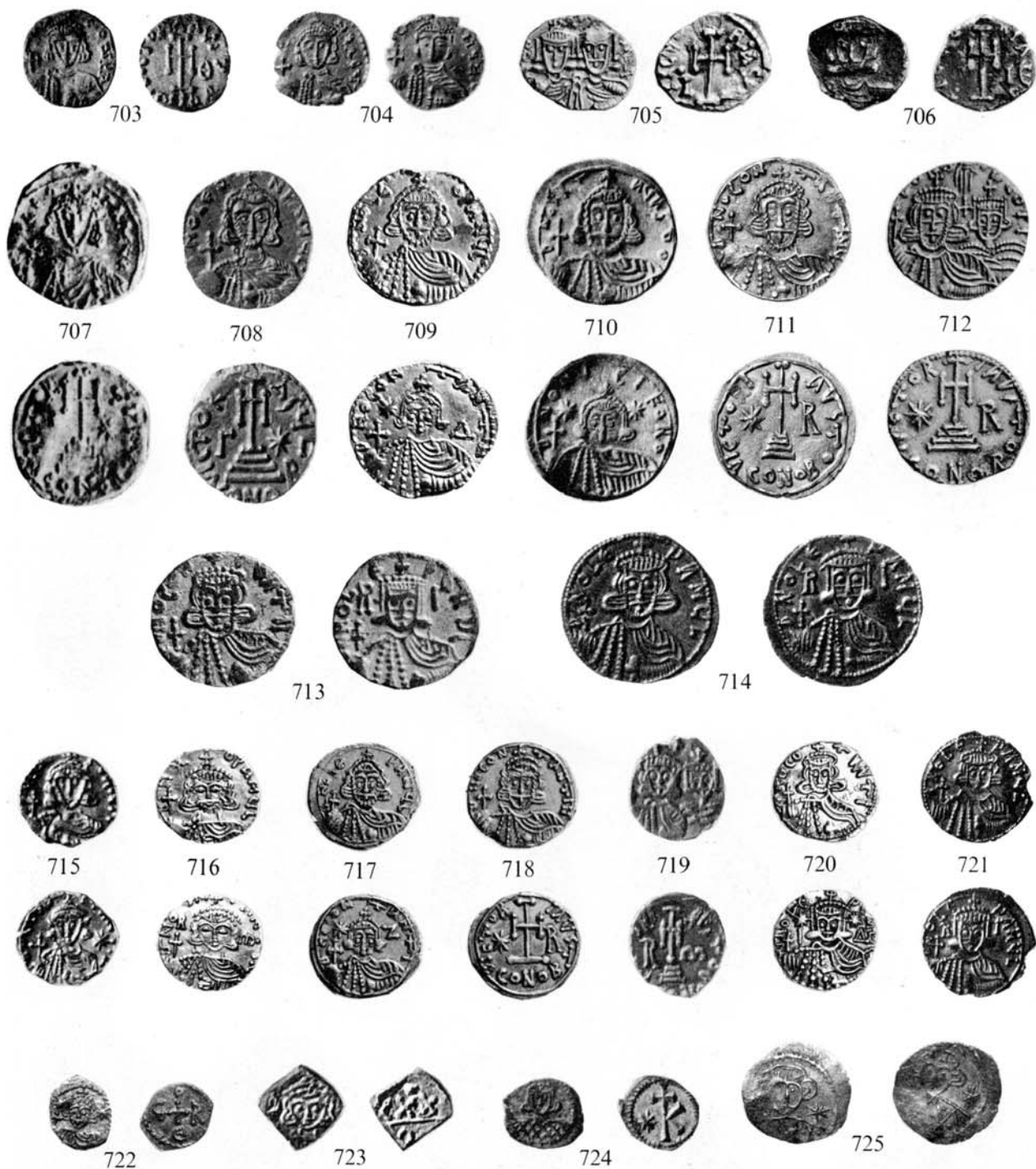


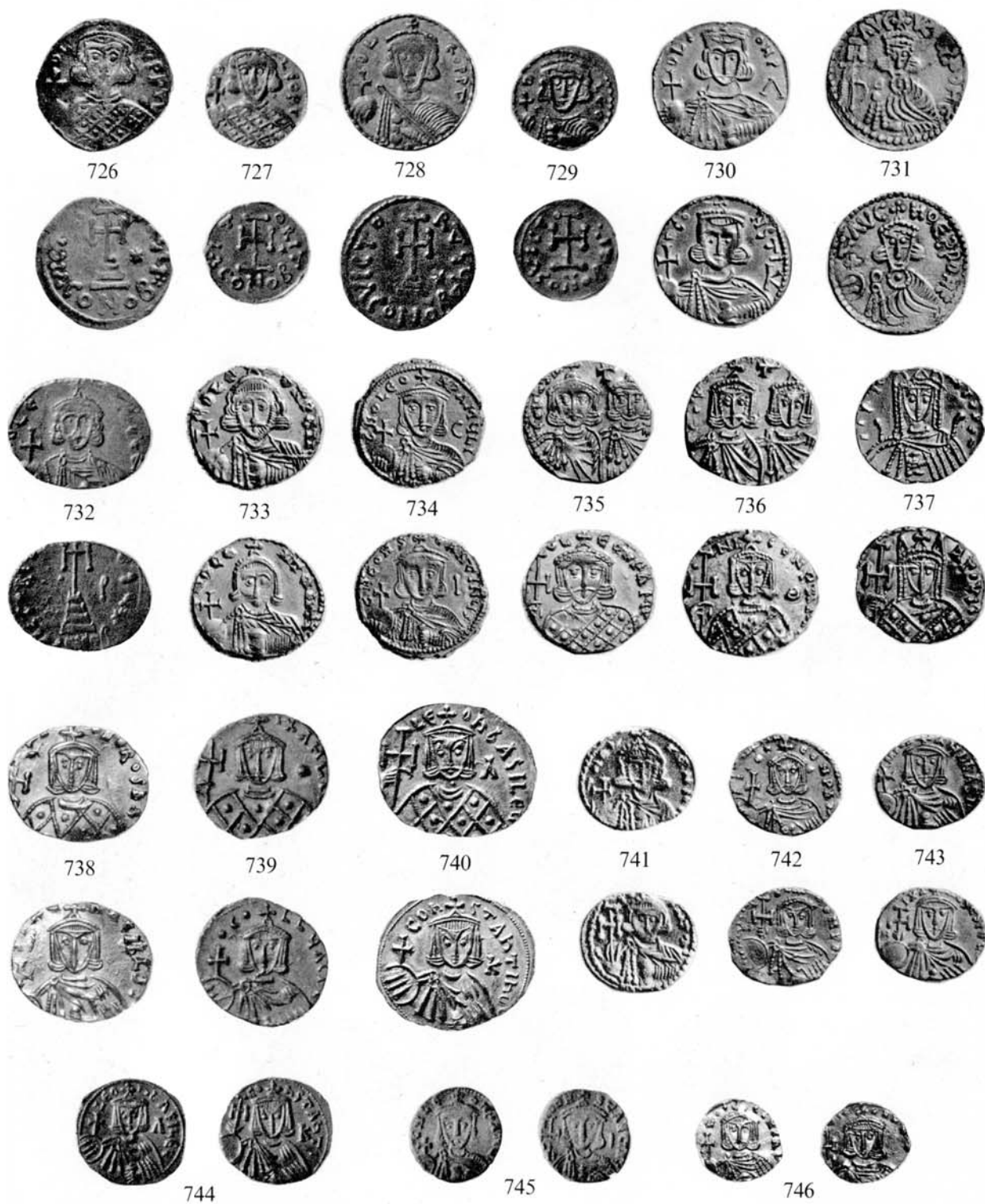
Constantinople: copper coinage, 717–c. 745





Constantinople: copper coinage, *c.* 745–820





Naples and Sicily: gold coins, 717-820







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Cherson continued: copper coinage



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Anonymous Folles, Classes A-F





990 (G)



991 (H)



992 (I)



993 (J)



994 (K)



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1000



1001





1002



1003



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1005



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1007



1008



1009



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Folles of Trebizond (eleventh-twelfth centuries)



Alexius I (1081-1118) (1)



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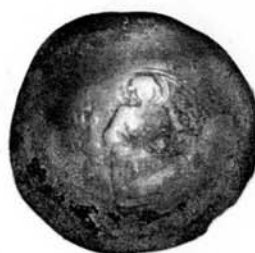




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Manuel I (1143–80) and Andronicus I (1183–5)



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Isaac II (1185–95) and Alexius III (1195–1203)



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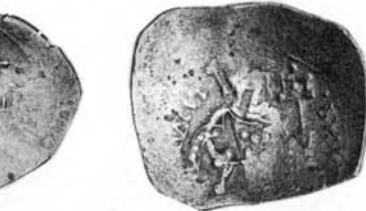
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Thessalonica (4): copper trachea



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Miscellaneous derivative coinages





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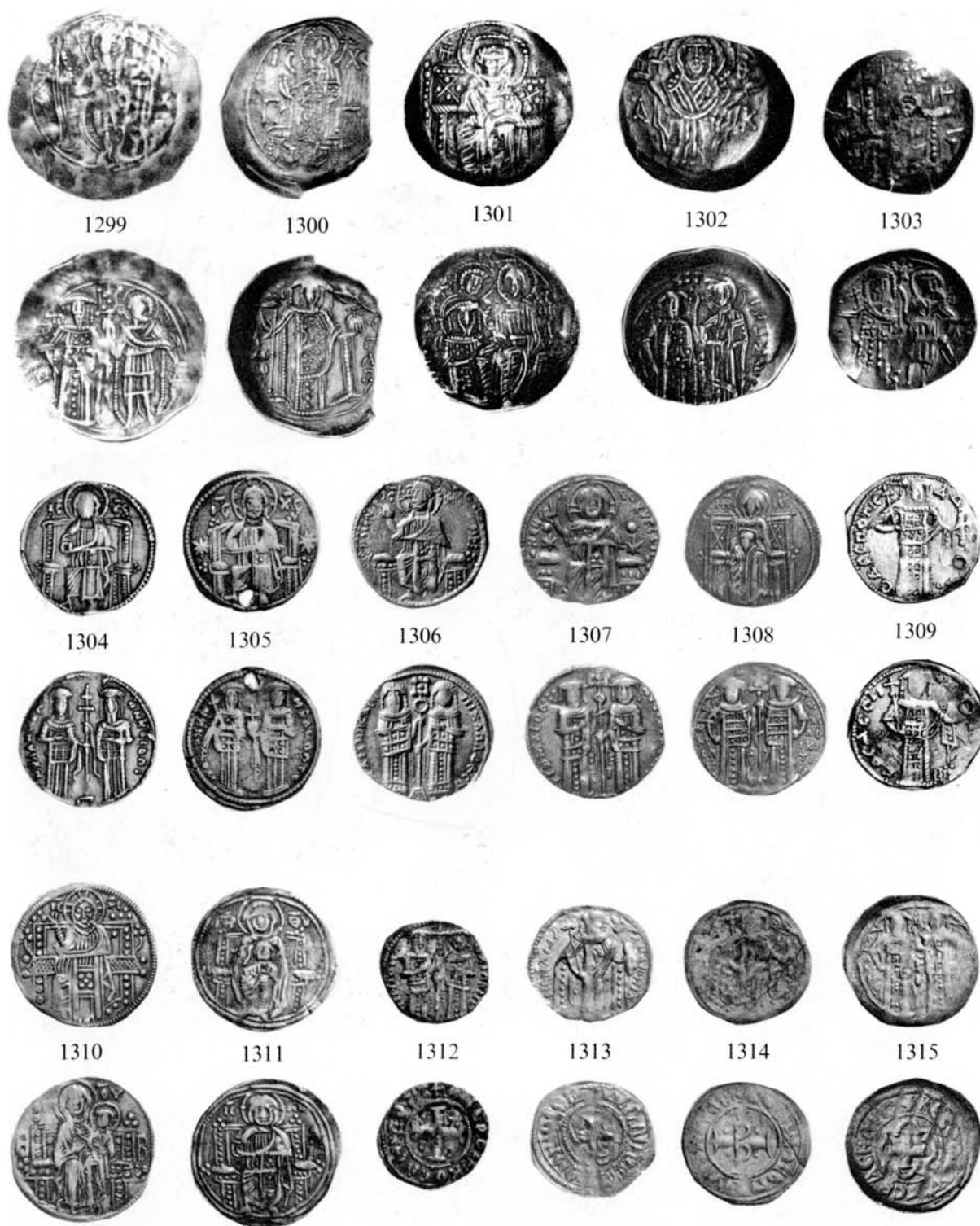


1297

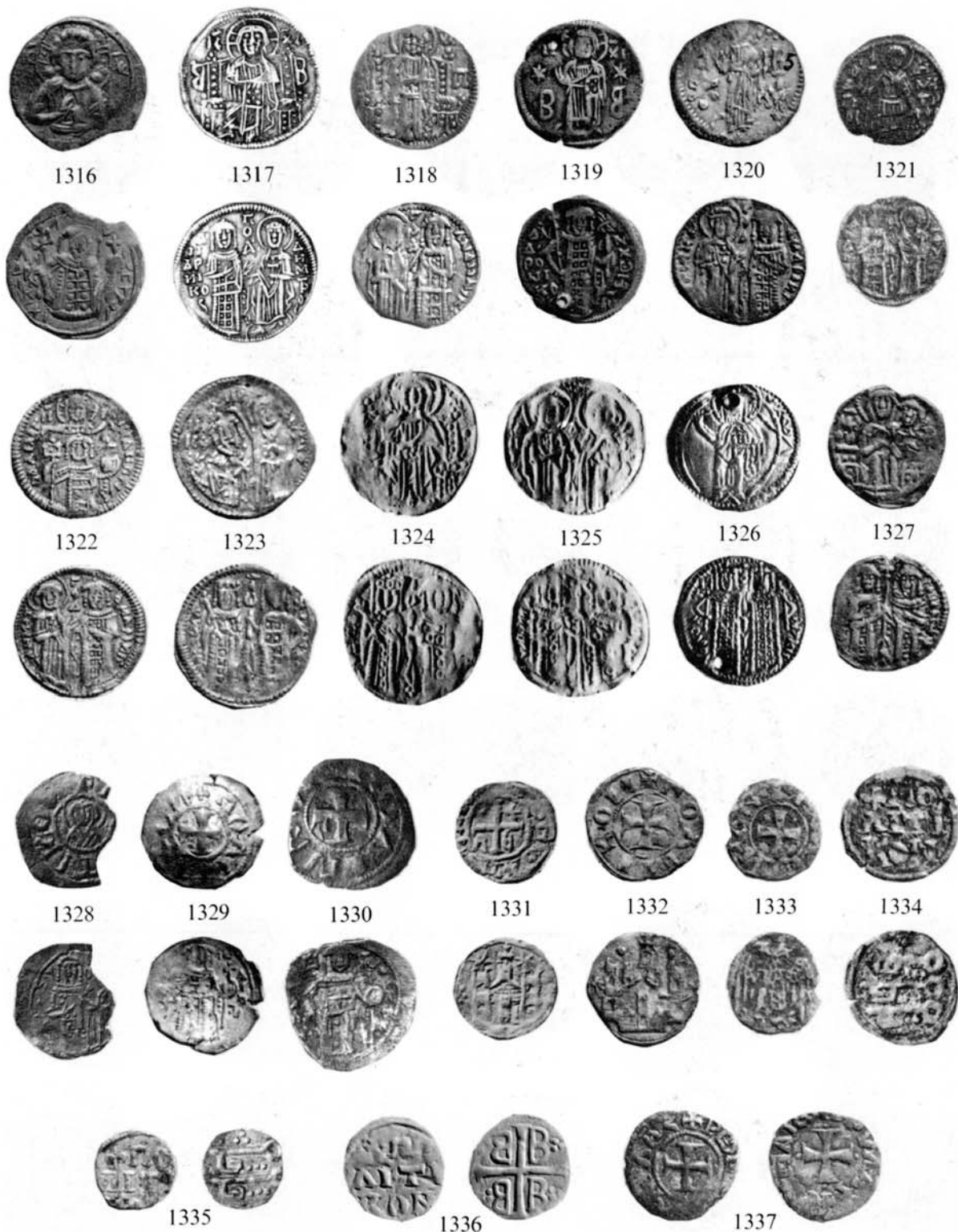


1298





Palaeologid silver and billon (1)





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Michael VIII (1259–82): copper trachea



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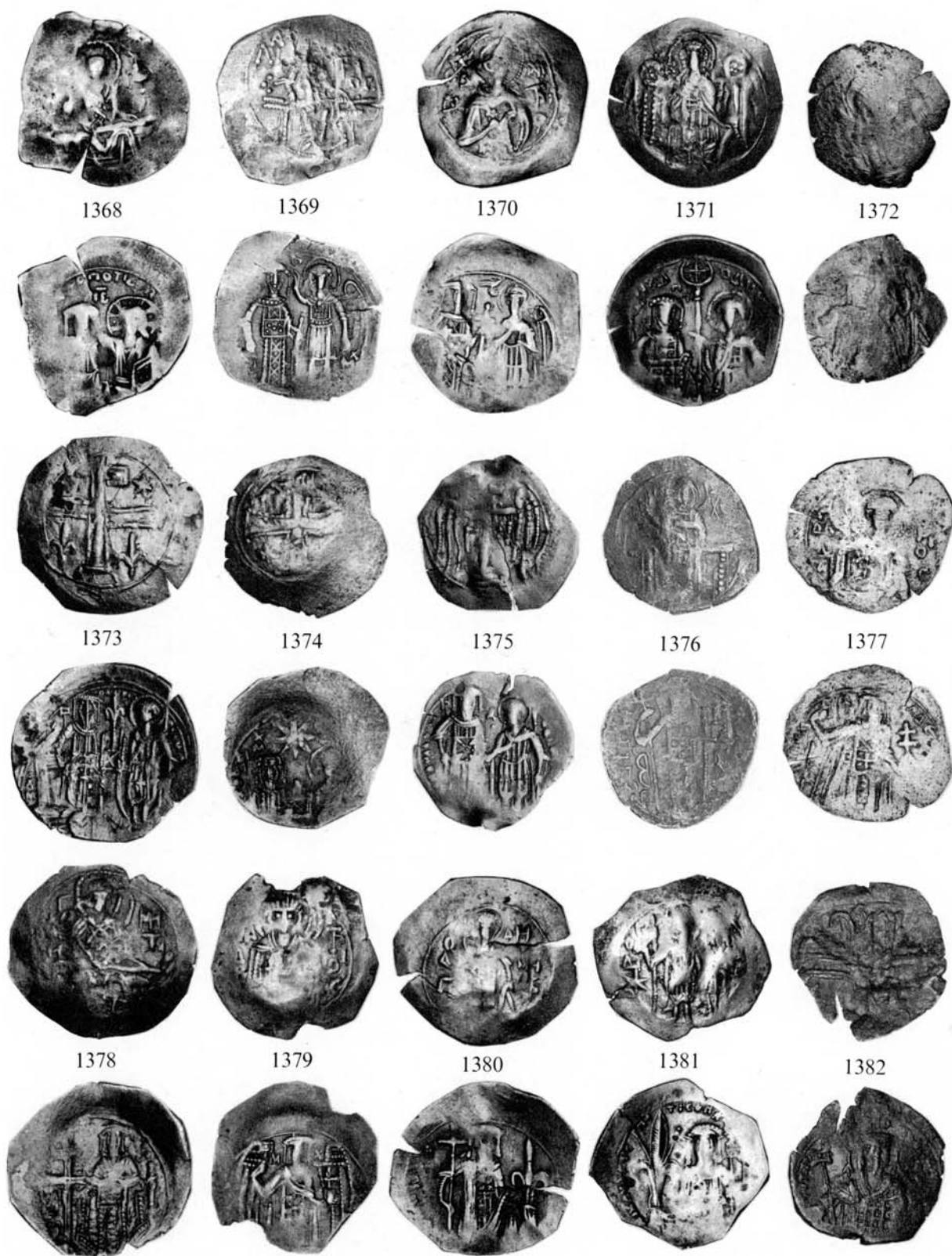
1366



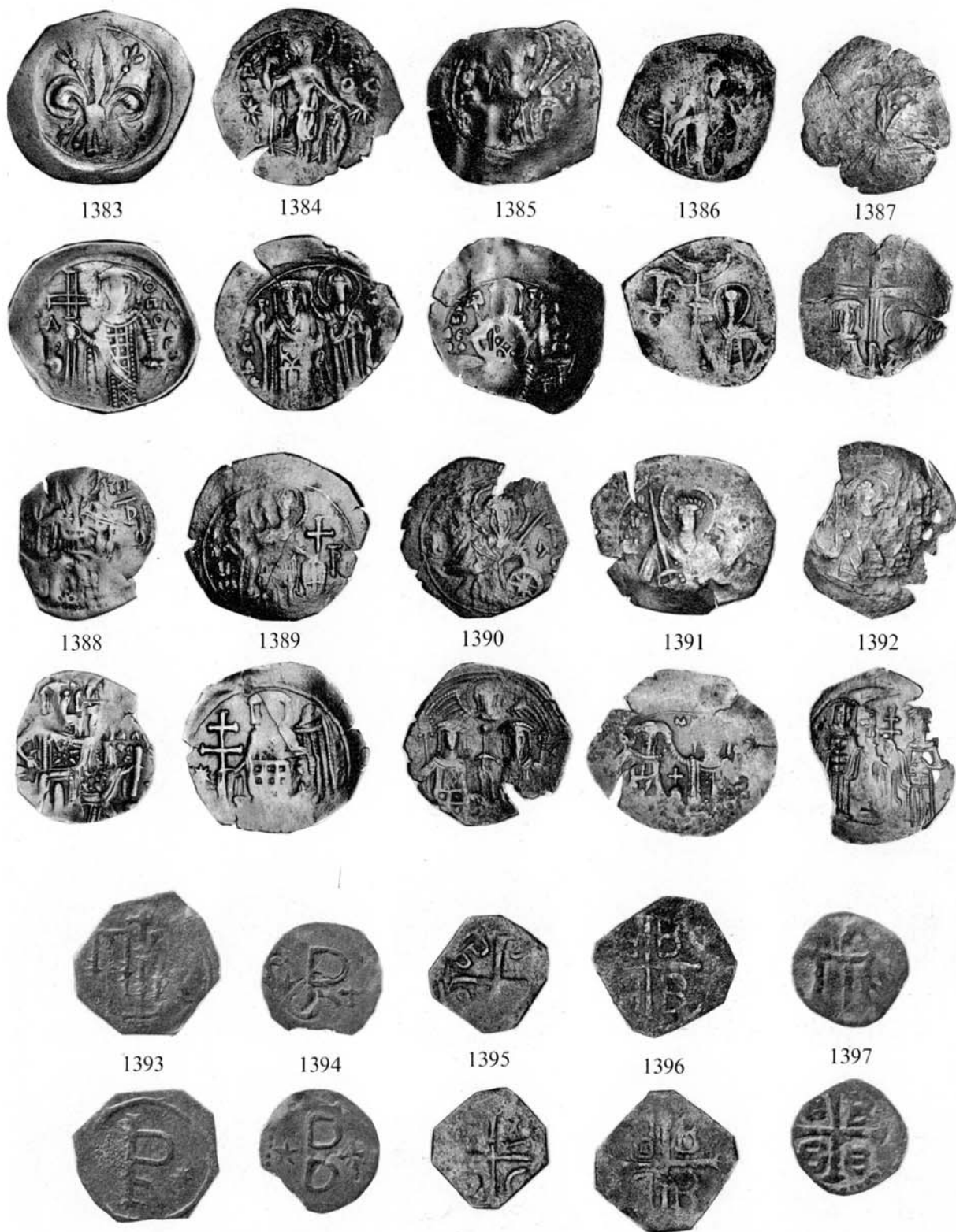
1367







Michael VIII (1259–82): Thessalonian trachea



Michael VIII (1259–82): Thessalonican trachea; and copper coins attributed to Rhodes



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Plate 91



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Plate 93



Constantinople: flat AE, Michael VIII and Andronicus II





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# PLATE AND TEXT CONCORDANCE

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Parentheses imply a coin is not specifically mentioned, only the group to which it belongs.

1 51	28 48, 55	55 56	82 60
2 50	29 55	56 58, 78	83 61
3 52	30 55	57 58, 78	84 61, 62
4 49, 52	31 55, 36	58 58, 78	85 61
5 48, 49, 52	32 53	59 36, 59, 78	86 61
6 49	33 53	60 36, 59, 78	87 61, 62
7 50, 57	34 53	61 59, 78	88 61, 62
8 50	35 49, 51, 53	62 59	89 61, 62
9 50, 56, 57	36 46, 53	63 59	90 61, 62
10 50, 57	37 54	64 59, 64	91 60
11 50, 57	38 54	65 59	92 61
12 57	39 54	66 59, 64	93 61, 62
13 57	40 54	67 50, 59, 60	94 61
14 57	41 54, 56	68 50, 59, 60, 64	95 60
15 52	42 54	69 35, 59	96 62
16 52	43 54	70 35, 59	97 61
17 52	44 54	71 35, 59	98 62
18 52	45 54	72 59	99 60
19 51	46 54	73 59	100 60
20 51, 52	47 46, 50, 54, 54	74 59	101 60
21 51, 52	48 57	75 59	102 49, 61
22 35, 52	49 57	76 50, 59, 60	103 62
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24 51, 52	51 58	78 59	105 62
25 51, 52	52 58	79 59	106 62
26 51, 52	53 58	80 60	107 62
27 55	54 56	81 60	108 62, 63



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110 62	157 68	204 72	251 82
111 62	158 68	205 72	252 82
112 62, 63	159 73	206 72	253 81
113 62, 63	160 73	207 72	254 80
114 63	161 73	208 72	255 80
115 63	162 73	209 71	256 80
116 63	163 73	210 71, 76	257 81
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118 63	165 46, 74	212 74	259 81
119 63	166 46, 74	213 72	260 81
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122 63	169 69	216 72	263 83
123 63	170 70	217 72	264 78
124 64	171 70	218 72	265 78
125 64	172 70	219 72	266 78
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134 65	181 70	228 75	275 90, 94
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143 67	190 71	237 76	284 90, 95
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150 67	197 71, 76	244 77	291 96
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155 68	202 71	249 80	296 90, 97

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315 93	362 109	409 115	456 125
316 93	363 109	410 (115)	457 125
317 100	364 110	411 (115)	458 125, 129
318 100	365 110	412 (115)	459 125
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342 104	389 114	436 118	483 128
343 105	390 114	437 118	484 128

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871 187	918 194, 200	965 202, 203	1012 229
872 188	919 200	966 201, 202, 203	1013 229
873 188	920 200	967 201, 202, 203	1014 229
874 188	921 200	968 202, 203	1015 229
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879 188	926 200	973 202	1020 224
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